ERIC REPORT RESUME

ED 010 053 10-05-66 24

THE IMPACT OF AGGRESSION IN THE CLASSROOM.

MCNEIL, ELTON B. * AND OTHERS
KUM37771 UNIVERSITY OF MICHIGAN, ANN ARBOR

CRP-S-136
- -66
EDRS PRICE MF-$0.27 HC-$5.92 148P.

*CLASSROOM ENVIRONMENT, *DISCIPLINE, *BEHAVIOR PROBLEMS, *HOSTILITY, *PARENT-CHILD RELATIONSHIP, SOCIAL ENVIRONMENT, PARENT REACTION, PEER RELATIONSHIP, ANN ARBOR, MICHIGAN, BUSS-DURKEE INVENTORY

IN THIS INVESTIGATION, AGGRESSION WAS MEASURED FROM FOUR PERSPECTIVES--(1) THE PERCEPTION THAT THE SUBJECT HAD OF HIS AGGRESSION, (2) HIS SATISFACTION, AS HE VIEWED IT, WITH HIS OWN AGGRESSION, (3) THE PERCEPTION THAT THE TEACHER HAD OF THE SUBJECT'S AGGRESSIVENESS, AND (4) THE PERCEPTION OF THE SUBJECT'S AGGRESSIVENESS HELD BY HIS CLASSMATES. IN THIS RESEARCH, THE BUSS-DURKEE INVENTORY WAS ADMINISTERED TO 166 HUSBANDS AND WIVES WHOSE CHILDREN ATTENDED THE LABORATORY SCHOOL. TESTS WERE DEVELOPED FOR THE CHILDREN. THE MASS OF DATA ACCESSIBLE FOR STATISTICAL ANALYSIS WHEN THE THREE INDEPENDENT BUT INTERRELATED RESEARCHES WERE COMBINED NECESSITATED AN UNUSUAL AMOUNT OF DECISION MAKING REGARDING WHICH OF THE FINDINGS SHOULD BE RELATED IN THIS REPORT. DETAILED ANALYSIS OF THESE DATA IS CONTINUING AND WILL BE REPORTED AT A LATER DATE. (JL)

ED010053

THE IMPACT OF AGGRESSION IN THE CLASSROOM

U. S. Office of Education Grants 04632 and S-136

Elton B. McNeil and William C. Morse
with
Warren A. Ketcham

The University of Michigan
Ann Arbor, Michigan

1966

ED010053

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education
This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent official Office of Education position or policy.

The Impact of Aggression in the Classroom

U. S. Office of Education Grants 04632 and S-136

Elton B. McNeil and William C. Morse
with
Warren A. Ketcham

The University of Michigan
Ann Arbor, Michigan

1966

The research reported herein was supported by the Cooperative Research Program of the Office of Education, U. S. Department of Health, Education, and Welfare.

Table of Contents

Page

Part I. AGGRESSION

Introduction 1
HOSTILITY AND GUILT IN HUSBANDS AND WIVES. 5
Subjects of the Study 13
Instruments 14
Anxiety about Aggression 19
The Socialization of Aggression 23
Flint Teacher Ratings 27
PEER NOMINATIONS AND AGGRESSION 30
SELF RATINGS 44
Self Esteem and Aggression 47
Theoretical Relationships 51
Special Research Problems 54

Part II. DIMENSIONS OF CHILDREN'S SOCIAL AND PSYCHOLOGICAL DEVELOPMENT RELATED TO SCHOOL ACHIEVEMENT

Overview 60
Factor Analyses of Classroom Questionnaire 63
Normative Data 67
APPLICATION OF THE SCHOOL CLASSROOM RESEARCH QUESTIONNAIRE TO A SPECIFIC CLASSROOM 75
CLASSROOM CHANGES--CONSISTENCIES OVERTIME 80
INTERRELATIONSHIP OF CHILDREN'S SOCIAL AND PSYCHOLOGICAL DEVELOPMENT AND ACADEMIC ACHIEVEMENT 86
The Date on Academic Achievement and Social and Psychological Variables 89

Part III.

The Parents 95
THE PERCEPTION OF AGGRESSION 98
Teacher Perceptions and Parental Hostility and Guilt 105
The Father's Self-Reported Guilt 107
The Mother's Self-Reported Guilt 109
The Combined Experience of Guilt in Mothers and Fathers 110
INTERRELATIONSHIP OF CLASSROOM, SELF CONCEPT, AND NEED VARIABLES 112

Relationship of Aggressiveness to Classroom Variables ... 118

Self-Concept (Semantic Differential) Group Norms and Creativity 120

School Self-Esteem (Coopersmith) and Creativity 121

Bibliography 123

Appendix A. Buss-Durkee Parent Hostility-Guilt Inventory. 130

Appendix B. Peer Nomination Variables 133

Appendix C. Self-Esteem Inventory 134

Appendix D. Semantic Differential 137

List of Tables

Page

TABLE 1
T Tests of Significance of Difference Between Means of Sub-Scales of the Buss-Durkee Inventory for Three Samples of Males 7

TABLE 2
T Tests of Significance of Difference Between Means of Sub-Scales of the Buss-Durkee Inventory for Three Samples of Females 9

TABLE 3
Correlation of Age and Education and Sub-Scale Score on the Buss-Durkee Inventory for Males in the Ann Arbor Sample 11

TABLE 4
Correlation of Age and Education and Sub-Scale Score on the Buss-Durkee Inventory for Females in the Ann Arbor Sample 12

TABLE 5
Correlations of Teacher Ratings of Aggression (Male and Female Students Combined: Grades 3-8, University School, 1961-1962) 18

TABLE 6
Correlations of Teacher Ratings of Aggression-Anxiety with Overt Expression of Aggression (Male and Female) Students Combined: Grades 3-8, 1961-1962, University School) 20

TABLE 7
Correlations of Teacher Estimates of Aggression and Inhibition of Aggression and Child's Satisfaction with Self (Grades 3-8, 1961-1962, University School, Male and Female Students Combined) 22

TABLE 8
Correlations of Estimates of Pupil Response to Teacher Socialization Efforts (Grades 3-8, 1961-1962, University School, Male and Female Students Combined 24

TABLE 9
Correlations of Estimates of Pupil Response to Teacher Socialization Efforts (Grades 3-9, 1961-1962, University School, Male Students Only) 24

TABLE 10
Correlations of Estimates of Pupil Response to Teacher Socialization Efforts (Grades 3-8, 1961-1962, University School, Female Students Only) 25

TABLE 11
Correlations between Ratings of Aggressiveness of the Child as a Whole and Response to Teacher Efforts at Socialization (1961-1962, Combined Male and Female, Grades 3-8, University School) 26

TABLE 12
Correlations between Teacher Estimates of Response to Socialization Efforts and the Child's Satisfaction with Self (Grades 3-8, University School, Combined Male and Female, 1961-1962 Sample) 26

TABLE 13
Correlations (Male and Female Students Combined: Two Seventh and Two Fifth Grades, Flint, 1962-1963 Sample) Teacher Rating of Aggression 27

TABLE 14
Aggression-Anxiety Correlations with Overt Expression of Aggression (Male and Female Students Combined: Two Seventh and Two Fifth Grades, Flint, 1962-1963 Sample) 28

TABLE 15
Correlations of Teacher Estimates of Inhibition of Aggression and Child's Satisfaction with Self with the Overt Expression of Aggression (With Male and Female Students Combined; Two Seventh and Two Fifth Grades, Flint, 1962-1963 Sample) . . . 29

TABLE 16
Correlation of Peer Nominations of Niceness and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined) 30

TABLE 17
Correlation of Peer Nominations of Niceness and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined) 31

TABLE 18
Correlation of Peer Nominations of Smart Aleck and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined) 33

TABLE 19
Correlation of Peer Nominations of Smart Aleck and Other Variables (University School; 1961-1962; Grades 3-8; Female Only) 34

TABLE 20
Correlation of Peer Nominations of Interpersonal Influence and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined) 36

TABLE 21
Correlation of Peer Nominations of Interpersonal Influence and Other Variables (University School; 1961-1962; Grades 3-8; Male Only) 37

TABLE 22
Correlation of Peer Nominations of Interpersonal Influence and Other Variables (University School; 1961-1962; Grades 3-8; Female Only) 38

TABLE 23
Correlation of Peer Nominations of Who Says Funnier Things Than Others? and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined) 40

TABLE 24
Correlation of Peer Nominations of Who Gets Into Trouble and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined) 40

TABLE 25
Correlation of Peer Nominations of Who Gets Into Trouble and Other Variables (University School; 1961-1962; Grades 3-8; Male Only and Female Only) 41

TABLE 26
Correlation of Peer Nominations of Who Is Good at Thinking Up New Ideas and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined) 42

TABLE 27
Correlation of Peer Nominations of Who Is Careful to Follow the Rules and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined) 43

TABLE 28
Correlation of Pupil Self Ratings Along 22 Dimensions (1961-1962 Sample; University School; Grades 3-8; Combined Male and Female) 44

TABLE 29
Correlation of Pupil Self Ratings Along 22 Dimensions (1961-1962 Sample; University School; Grades 3-8; Combined Male and Female) 45

TABLE 30
Correlation of Pupil Self Ratings Along 22 Dimensions (1961-1962 Sample; University School; Grades 3-8; Combined Male and Female) 46

TABLE 31
Intercorrelation of Academic Achievement (Ed.A) and Social and Psychological Variables for 1962, 1963, and 1964 91

TABLE 32
Intercorrelations of Organismic Age and Social and Psychological Variables 92

TABLE 33
Intercorrelations of Parent Scores on the Buss-Durkee Hostility-Guilt Inventory (Combined Sample Grades 3-8) 96

TABLE 34
Intercorrelations of Buss-Durkee Hostility-Guilt Inventory Scores for Fathers and Peer and Teacher Ratings of the Child's General Aggressive Behavior 97

TABLE 35
Intercorrelation of Teacher Ratings of Aggression and of the Child's Response to Socialization Efforts (Combined Grades 3 through 8) 99

TABLE 36
Correlations Between the Torrance and Barron Creativity Measures and Reading Quotient (Combined Group of Grades Three through Eight) 102

TABLE 37
Correlations of Measures of Creativity With Peer Ratings of Wants to Give Answers in the Classroom Situation (Combined Grades 3 through 8) 103

TABLE 38
Intercorrelations of Peer Perceptions and Self-Perceptions (Grades 7-8) 104

TABLE 39
Intercorrelations of Peer Perceptions and Self-Perceptions (Grades 3-6) 104

TABLE 40
Intercorrelations of TeacherRatings of Aggressiveness and Father's Score on the Buss-Durkee Hostility-Guilt Inventory for Grades 3-6 and 7-8. 105

TABLE 41
Intercorrelations of Husband-Wife Scores on Selected Dimensions of the Buss-Durkee Hostility-Guilt Inventory for Grades 3-6 and 7-8 106

TABLE 42
Intercorrelations between Fathers Guilt Score on the Buss-Durkee and Selected Variables from the Combined Study for Grades 3-6 and 7-8 107

TABLE 43
Intercorrelations of Mother's Guilt Score on the Buss-Durkee Inventory of Hostility-Guilt and Measures of Performance and Creativity for Grades 3-6 and 7-8 109

TABLE 44
Intercorrelations of Composite Score of Father's and Mother's Self-Reported Guilt on the Buss-Durkee Hostility-Guilt Inventory with Measures of Performance in Grades 3-6 and 7-8 111

TABLE 45
Interrelations of Combined Parental Guilt Scores on the Buss-Durkee Hostility-Guilt Inventory and Measures of Self-Esteem Among Children in Grades 3-6 and 7-8 111

TABLE 46
Intercorrelations of Classroom, Self and Need Variables . 116
117

TABLE 47
Relationship of Aggressiveness and Classroom Variables. . 118

TABLE 48
Aggressiveness and Classroom Dimensions 119

TABLE 49
Self Concept and Creativity 120

TABLE 50
School Self Esteem (Coopersmith) and Creativity 121

TABLE 51
Norm Behavior and Creativity 122

Aggressiveness, Mental Health, and Creativity: the Invisible Curriculum [*]

William C. Morse, Elton B. McNeil,
and Warren Ketcham

The literature of education is replete with studies separately exploring the topics of mental health, creativity, and aggression in children of school age. These areas constitute a form of invisible curriculum since they are ongoing elements of the constructional process yet they rarely are considered in detail with reference to the classroom and they even more rarely are considered with reference to one another. The purpose of this interlocking set of researches is to make a beginning in studying each topic in some depth and combining all three areas through the rise of an approximately common population of subjects. The separate efforts of Professors McNeil, Morse, and Ketcham were used to explore, in turn, aggressiveness, mental health classroom orientation, and creativity. The combination of these independent studies and the search for interrelationships between the disparate elements of each are reported here.

Part I of this report is devoted to the study of perceived aggression among members of the classroom, Part II focused on the mental health orientation of the classroom, and the final section of the report (Part III) attempts to combine these elements in terms of their inter-correlations. Only selected findings from each of the studies is reported here in an attempt to gain coherence in the overall report.

---

[*] The studies reported here were supported by U.S. Office of Education Grants #04632 and #5-8086-2-12-1.

Part I

Aggression

Introduction

Past studies of aggression have most often suffered from a lack of scope or have been subject to fragmentation based on a narrow focus on restricted facets of behavior. Limited to the exploration and correlation of various internal aspects of aggression, there has been little examination of the relationship of aggression to a variety of other vital features of the child's social, emotional, intellectual, and academic life. The absence of large scale studies relating aggression to other dimensions of personality and behavior can be traced in part to the difficulty of launching and sustaining such a massive research program. The circumstances of our joint program of data collection made possible an analysis of the relationship of aggression to the developing self-concept and self-esteem of the child, to facets of his or her ability to think critically, creatively, and productively, to his attitude toward school and learning, and to the peer group code as reflected in the social structure and social climate of the classroom.

The problem posed here is not simply analysis of the disruptive effects of raw aggression in the classroom--this is essentially a clinical or mental health task. Our task is to relate the total range of aggression --from laudable self-assertion to angry retaliation--to the process of education, its organization, its classroom methods and climate and its recognition of aggression as a motive force in learning. Normally, an account of the related literature would focus on those studies which present experimental evidence that the relationship of aggressiveness to creativity and to classroom structure is a fruitful research direction to pursue. Unfortunately, the useful literature on such topics consists almost exclusively of unrelated fragments and noncoherent bits. There has been a fair amount of speculation about theoretical possibilities and probabilities but the validity of these speculations is impossible to judge.

The current literature differs little from experimental observations made in the preceding decade. By this I mean to suggest only that no major breakthrough (either in instrumentation or theory) has taken place in the recent past. The primary problem is that of describing aggression in terms of quantity as well as quality. Without measures of quantity, the approach to aggression is limited to descriptive, theoretical assessments. Since aggression can be expressed in devious ways and has a multitude of disguises, efforts to measure it face the task of differentiating hostility from its camouflage. Social controls are such that even a tremendous anger welling up in an individual may never reach the stage of overt expression or be readily apparent to an observor. As a consequence, tests developed to quantify hostility do not always measure the same thing (Goodstein, 1954; Grace, 1951). The search for a simple, reliable, valid measure of aggressiveness continues but it remains a source of despair for the social scientist.

A number of paper-and-pencil tests have been developed (Buss & Durkee, 1957; Buss, Durkee, and Baer, 1956; Siegel, 1956) and a variety of projective tests (Counts & Mensh, 1950; Ingram, 1954; Lindzey & Tejessy; 1956; McGee, 1954; Pattie, 1954; Stone, 1956) have been employed to solve this problem. In each instance, the relationship of the attitudinal to the behavioral aspect of aggression has remained obscure. As a part of this search for aggressive reality, there have been a number of studies which have tried to separate hostility into its components in behavior and in fantasy (Gluck, 1955, 1955a; Mussen & Naylor, 1954, Purcell, 1956). Kagan (1956), Hokanson and Gordon (1958), Lesser (1957, 1958), Mussen and Naylor (1954), and Holzberg, Bursten, and Santicciol (1955) have, among others, been active in the search for a solution to this problem of quantification congruent with constructs of qualitative assessment of aggression.

There have been several attempts to relate aggression to education in a meaningful way. Sperry, Staver, and Mann (1952) made one such attempt. Lewin, Lippitt, and White (1939) pioneered explorations of group atmosphere; Anderson, Brewer, and Reed (Anderson & Brewer, 1945; Anderson & Brewer, 1946; Anderson, Brewer, & Reed, 1946) extended these observations to the classroom setting, and Child, Levine, and Potter (1946) traced the textbook for an appraisal of aggression. The Buss-Durkee Inventory (1957) remains one of the best instruments to quantify aggression. Since aggression more often than not is a phenomenon that resides principally in the eye of the beholder, measures of the perceptions of peers and teachers seems most relevant to the study of aggression. It was on the basis of this conclusion that the instruments of the present research were constructed. In most instances construction relied heavily on a mixture of invention and compromise with what was extant. From these measures and this orientation the objectives of this research were formulated.

The Transmission of Parental Aggression

Past studies of aggression reveal that except in unusual circumstances no simple, direct, or literal translation of hostility or aggression is possible between child and like-sexed parent. It is usual to assume that the child acquires behavior that reflects a composite of parental traits--a composite that is a function of the nature of his personal experience with his parents; a composite that is influenced by the social and environmental surround in which he may find himself. This theoretical analysis of aggression has never been put to an empirical test.

Our Buss-Durkee Hostility-Guilt Inventories on 166 parent pairs make it possible to analyze the hostility-aggression-guilt complex as it traces from parent to child and as it gets expressed in the educational setting. The hostility-aggression-guilt scores of the parents are examined in terms of their relationship to: 1) the child's creativity, 2) the perceptions peers and teachers have of the child, 3) his self-concept, 4) his self-esteem, and 5) his motivation to learn. Composite scores on hostility-aggression-guilt, fashioned from the combined scores of the parents, are used as predictors of the child's response to education and of his peer situation. The objective of this aspect of the analysis is to relate self-ratings of parental aggression to the educational fate of the child along a series of dimensions of the classroom process.

Aggression in the Service of Creativity

An argument rages regarding the basic constituents of creativity and the issue is yet unresolved regarding education's role in producing creativity rather than simply mid-wifing its arrival. The part aggression plays in creativity has never been adequately explored. It is possible, given the necessary level of native intelligence and proper emotional support for the nature of creativity to be a function of the child's management of his basic hostility. A certain amount of aggressiveness in approaching problems, in discarding well-worn approaches and solutions, and in thinking in unique channels may be a prime requisite of non-trivial creation. In this respect, aggressiveness can be a positive force in critical and productive thinking both in providing the necessary intellectual assertiveness to look beyond the ordinary and in providing the thinker with the ability to communicate his ideas to others while withstanding their criticism of such departures from the norm.

By the same token, the total interaction of age, sex, aggressiveness, creativity and response to the classroom process needs to be explored. Of particular significance, is the contrast in creativity between members of upper-middle and upper-lower social classes. While a number of researchers have noted differences in the overt and covert status of the expression of aggression in the various socio-economic classes, little attempt has been made to connect these phenomena to those of creativity and the educational process.

Aggression and the Classroom

Professor William C. Morse has defined, experimentally, dimensions of the classroom and of the child's self-concept which include a number of indexes of classroom learning, social structure, social climate, mental health, and self-concept. The complex interrelationship of aggression and the degree of pupil involvement in classroom activity (motivation and interest), the extent of classroom emphasis on conventional intellectual processes (memory, convergent rather than divergent thinking, etc.), and the self-and-classroom-group-norms for learning are reported below.

Another set of dimensions important to the study of aggression in the classroom is what Morse has designated as concentrated versus dispersed classroom authority and the form of classroom control. In previous studies of aggression and the school, classrooms have been treated as equivalent with little regard for the differences in social structure and climate of the particular classroom. Aggressive behavior and hostile attitudes are one form of response to a classroom structure focused on competition, conformity, strict discipline, and teacher centralization of power; this reactive aggression ought to be measurable and predictable. The availability of longitudinal measures both of aggression and of shifting classroom structure allows an assessment of the fluctuating aggressive response of the same group of children to a variety of classroom structures.

HOSTILITY AND GUILT IN HUSBANDS AND WIVES*

The interplay of hostility and guilt between husband and wife is a timeless but little explored problem. As a not infrequent event in the course of human affairs, it is a vital aspect of the most initmate relation of man to woman and its impact has a reach beyond calculation. The dynamic interaction of hostility and guilt in marital relations guides the course of the marriage and reverberates in the lives of those close to the mated pair—children, relatives, and friends.

A frequent approach to the appraisal of hostility in normal adults has been to present the subject with questions--with which he can agree or disagree--regarding various aspects of hostility and its expression. Most often, such questions have been items adapted from the Minnesota Multiphasic Personality Inventory (Buss, Durkee, and Baer, 1956; Charen, 1955; Cook and Medley, 1954; Siegel, 1956; Dinwiddie, 1954; McGee, 1954; Moldawsky, 1953; Schultz, 1954; Smith, 1954). When scores on such inventories are compared with ratings and observations of actual hostile or aggressive behavior, the findings have been, on the average, inconsistent or ambiguous. Paper-and-pencil instruments have not been particularly satisfactory and effects to construct a suitable inventory from items other than, or in addition to, those contained in the MMPI have not fared much better (Bass, 1956; Bass, 1957; Edwards, 1954; Fisher, 1956; Walters and Zohs, 1959; Zohs and Walters, 1959). Great masses of items developed empirically or rationally shrink to a precious few when tested against a criterion of actual behavior. (Appendix A).

In an attempt to refine the omnibus-like character of the usual aggression hostility inventory, Buss and his co-workers constructed a promising device (Buss, 1959; Buss and Durkee, 1957; Buss, Durkee, and Baer, 1956). The Buss-Durkee Inventory divides hostile-aggressive behavior into a number of sub-classes (Assult, Indirect Aggression, Irritability, Negativism, Resentment, Suspicion, and Verbal Aggression) intended to represent two kinds of hostility and five kinds of aggression (Sarason, 1961). To these scales was added the category of Guilt. To minimize the usual defensiveness of respondents, Buss and Durkee constructed items that assumed the existence of a socially undesirable state and thus provided justification for the occurrence or expression of aggression. Sixty-six hostility and nine guilt items, selected after a careful item analysis, comprise the final form of the inventory. The factor analysis of the sub-scales (Bendig, 1961; Sarason, 1961) and a test-retest measure of hostility give further promise to the inventory.

---

*Research assistant on this project was Mrs. Shirley Roberts

In this research, the Buss-Durkee Inventory was administered to 166 husbands and wives whose children attended the University of Michigan Laboratory School. The Inventory was mailed to 313 addresses. A total of 368 respondents returned completed forms. Of this 53 percent return, 166 husband-wife pairs made up the final sample. Respondents from broken homes (19 women and 1 man) were eliminated from the sample.

These respondents differ from the typical sample of college students used to assess hostility. The husbands of the Ann Arbor Sample average 44½ years of age and their wives average 42 years. These husband-wife pairs have produced an average of three children (2.98) during the course of their marriage. The male in the family is educated slightly beyond the level of a Master's degree and his wife has finished academic work just past the bachelor's degree. The age, education, and family status of the members of the Ann Arbor sample are reflected in the comparison of their Buss-Durkee Inventory scores and the scores of college students and adult psychiatric patients on the same Inventory. The Ann Arbor sample inventories were signed, rather than anonymous, and are thus more comparable to signed data collected from students at Washington State College and Eastern State Hospital Patients by Dr. James Flynn (reported by Buss, 1961). Research workers regularly report significant differences in the scores of anonymous and signed inventories.

TABLE I

T Tests of Significance of Difference Between Means of Sub-Scales of the Buss-Durkee Inventory for Three Samples of Males

	Ann Arbor Sample (AA)* vs. Washington State College Sample (WSC)**		Ann Arbor Sample vs. Eastern State Hospital Sample (ESH)***		Wash. State College Sample vs. Eastern State Hospital Sample	
Sub-Scale	Direction	T	Direction	T	Direction	T
Assault	AA WSC	-4.46[3]	--	--	--	--
Indirect Hostility	--	--	--	--	WSC ESH	2.45[1]
Irritability	AA WSC	-2.79[2]	--	--	--	--
Negativism	--	--	--	--	--	--
Resentment	AA WSC	-4.91[3]	AA ESH	-5.59[3]	--	--
Suspicion	AA WSC	-6.29[3]	AA ESH	-6.94[3]	--	--
Verbal Hostility	AA WSC	-5.10[3]	--	--	WSC ESH	3.82[3]
Guilt	AA WSC	-4.28[3]	AA ESH	-6.41[3]	--	--

* AA Sample N=166
** WSC Sample N= 70
*** ESH Sample N= 52

1 Significant at the .05 level
2 Significant at the .01 level
3 Significant at the .001 level
-- No significant difference

Table I displays the primary systematic differences between the Ann Arbor and Washington State College sample. In six of the eight sub-scales of the Buss-Durkee Inventory, the Washington State College sample significantly exceeds the score of the Ann Arbor sample. If the Ann Arbor males are viewed as older, ex-college students, Table I would suggest that current male college students are more assaultive, irritable, resentful, suspicious, verbally hostile, and guilty than their aging counterparts. When the Ann Arbor sample is compared with patients in an Eastern State Hospital, they differ significantly from the patients primarily in Resentment, Suspicion, and Guilt--in each instance the Ann Arbor sample has a lower score than the patients. In turn, the Washington State College sample differs significantly from the Eastern State Hospital sample only by surpassing it in Irritability and Verbal Hostility. In many respects, the Ann Arbor sample differs in the form of its self-confessed hostility in greater measure from young males than from psychiatric patients more nearly their own age.

Regularly, in the three samples, the adult males of the Ann Arbor sample score less high on the sub-scales than either college students or psychiatric patients. The portrayal of college students on the Buss-Durkee Inventory seems to reflect the vigor of youth when compared with the older Ann Arbor and Eastern State Hospital samples. Scores of the college students are higher than both of the other samples except along the dimension of Negativism. The Eastern State Hospital sample exceeds the Ann Arbor sample in degree of Resentment, Suspicion and Guilt but does not differ significantly from the Washington State College sample on these dimensions.

The single dimension on which no significant differences appear between the three samples is negativism. It is possible this result occurs because Negativism has the poorest test-retest produce-moment correlation reported by Buss-Durkee and because it is the dimension of the test formed by the fewest items.(5).

TABLE 2

T Tests of Significance of Difference Between Means of Sub-Scales of the Buss-Durkee Inventory for Three Samples of Females

	Ann Arbor Sample (AA)* vs. Washington State College Sample (WSC)**		Ann Arbor Sample vs. Eastern State Hospital Sample (ESH)***		Wash. State College Sample vs. Eastern State Hospital Sample	
Sub-Scale	Direction	T	Direction	T	Direction	T
Assault	--	--	--	--	--	--
Indirect Hostility	AA WSC	-3.64[3]	AA ESH	2.58[1]	WSC ESH	4.81[3]
Irritability	--	--	--	--	--	--
Negativism	--	--	--	--	--	--
Resentment	AA WSC	-2.78[2]	AA ESH	-6.45[3]	WSC ESH	-3.10[2]
Suspicion	AA WSC	-3.16[2]	AA ESH	-6.81[3]	WSC ESH	-3.37[3]
Verbal Hostility	--	--	--	--	--	--
Guilt	--	--	AA ESH	-3.81[3]	WSC ESH	-3.01[2]

* AA Sample	N=166
** WSC Sample	N- 58
*** ESH Sample	N= 73

1 Significant at the .05 level
2 Significant at the .01 level
3 Significant at the .001 level
-- No significant difference

The T Test comparison between female respondents in the three samples in Table 2 show a more uniform pattern of significant differences than do the males. The dimensions of Indirect Hostility, Resentment, Suspicion, and Guilt contain all the significant differences. It is interesting that three of the four dimensions (Resentment, Suspicion, and Guilt) are the ones that make up Buss-Durkee's first factor for females. The Ann Arbor sample of females score less high than the other samples on all significant comparisons with the exception of greater Indirect Hostility than women of the Eastern State Hospital Sample. The Washington State College females show consistently less high scores than their male counterparts, being exceeded by the Eastern State Hospital Sample along three out of four dimensions.

A clear rank-ordering is possible along the dimensions of Resentment and Suspicion. The highest scores are achieved by the Eastern State Hospital Sample and, in descending order, the Washington State Sample then the Ann Arbor Sample of women. In Indirect Hostility the rank-ordering is altered with the Eastern State Hospital occupying the lowest rung, the Ann Arbor Sample in the middle, and Washington State College Sample on the top.

The matter of Guilt is even more clear-cut. Here the Eastern State Hospital sample records significantly more Guilt than either of the other two samples. Ann Arbor and Washington State College women do not differ significantly from one another.

Tables 3 and 4 reveal the existence of significant negative relationships between age, education, and some sub-scales of the Buss-Durkee Inventory.

TABLE 3

Correlation of Age and Education and Sub-Scale Score on the Buss-Durkee Inventory for Males in the Ann Arbor Sample

	Assault	Indirect Hostility	Irritability	Negativism	Resentment	Suspicion	Verbal Hostility	Guilt
Age	-.10	-.18*	-.13	.09	-.19*	-.03	-.22**	.07
Education	-.05	.05	-.06	-.06	.11	.03	-.18*	-.26**

* Significant at the .05 level
** Significant at the .01 level

TABLE 4

Correlation of Age and Education and Sub-Scale Score on the Buss-Durkee Inventory for Females in the Ann Arbor Sample

	Assault	Indirect Hostility	Irritability	Negativism	Resentment	Suspicion	Verbal Hostility	Guilt
Age	-.05	-.19*	-.08	.04	-.19*	-.11	-.20**	.08
Education	.00	-.16*	.03	.03	.21**	.12	.01	-.13

* Significant at the .05 level
** Significant at the .01 level

For both men and women in the Ann Arbor Sample, a significant relationship exists between age, Indirect Hostility, Resentment and Verbal Hostility. In each instance a significant negative correlation exists such that scores on each of these dimensions decrease with increasing age.

When the relationship of education and various sub-scales is examined, it is evident that the sex of the respondent exerts an influence. For men, Verbal Hostility and Guilt decrease with greater education while for women, Indirect Hostility decreases with advanced education but Resentment increases directly with the degree of education completed. When both age and education for both men and women are examined in relation to scores on the various sub-scales, it is interesting to note that nine of the ten significant relationships are accounted for by just three dimensions (Indirect Hostility, Resentment, and Verbal Hostility) the single exception being a decrease in Guilt for men with greater education.

These findings are not startling in themselves and over-interpretation of their meaning is easily possible but a great deal could be made of the fact that the single positive correlation was that of an increase in Resentment among best educated women.

The study of parental hostility and guilt among parents in our sample of subjects points particularly to the need for a cautious appraisal of inventory-based findings of hostility and guilt. The results follow predictable theoretical lines and make sense when compared to populations to which this inventory has been applied. What is abundantly clear is that the child in the classroom comes to education bearing a load of previous experience with adult male and female parents whose measure and balance of hostility and guilt must have had its import on the composition of his own psychic structure.

The children of these parents are an interesting study in themselves. Bearing this unique learned, 'inheritance' of hostility and guilt, each child must respond to the classroom, the teacher, and his peers with the particular design of interrelationships he has crudely developed in his formative years.

The Subjects of the Study

The subjects were drawn from schools in Ann Arbor and Flint, Michigan. The students from Ann Arbor attended the University School and, as is typical of many university sponsored schools throughout the country, many of the children come from homes where there is considerable intellectual and cultural stimulation. Thus, the Ann Arbor sample is representative of an upper middle class population while the Flint sample, drawn from two schools, was chosen to be primarily representative of a lower class population. The father's occupation was selected as the indicator of social class and a six-part classification of occupation was used. The Ann Arbor sample was comprised primarily of children whose fathers were professionals, managers, officials or proprietors. Parental occupations of the Ann Arbor children typically were university professor, physician, dentist, laboratory technician, engineer, lawyer, business owner, store manager, etc. The children in the Flint sample had fathers who were factory workers, foremen, bartenders, dairy workers, milkmen, and related occupations.

In the Flint sample the minimum age group was chosen from fifth grade children and the upper limit was the eighth grade. The sample in Flint was composed of two fifth grade classes and two seventh grade classes. In general, the intelligence of the two groups differ. The Ann Arbor sample is above average in intelligence and the Flint sample is average in measures of intellect.

Instruments

In this investigation, aggression was measured from four perspectives: the perception that the subject had of his own aggression, his satisfaction, as he viewed it, with his own aggression, the perception that the teacher had of the subject's aggressiveness, and the perception of the subject's aggressiveness held by his classmates.

Measures of Aggression--Children

PEER NOMINATIONS OF AGGRESSION. The purpose of this form is to measure the perception of aggressive behavior of subjects as viewed by their peers. The form consists of 25 questions, each of which is printed on a separate page together with the names of all the children in the class. Subjects were instructed to draw a line through as many, or as few, names of peers whom they felt the question described adequately. If the subjects had known that the instrument was measuring aggression, response sets might have been produced which could have had unknown effects upon the results. Therefore, a number of "buffer" items were inserted between the questions designed to measure aggression. Of the 25 questions on the form, eight were used to represent different types of aggression. The aggression questions are as follows: 1. Who acts smart alecky? 2. Who makes it hard for others to get things done? 3. Who argues with everybody? 4. Who says mean things? 5. Who says bad things about others? 6. Who gets very, very mad at times? 7. Who gets into trouble? 8. Who gets angry easily? 9. Who pushes or shoves?

Scores were calculated by adding the number of nominations received by each child for each question. If, for example, five children felt the subject said bad things, the subject obtained the score of five for that item. Since the smallest class had twenty-three students this was used as a base line, so that a class with more students, for example, had the nominations of other children randomly discarded. (Appendix B).

SELF DESCRIPTION OF AGGRESSION. This instrument served to measure the perception the subject had of his own aggressive behavior. Because of social prohibitions against the expression of aggression, subjects might normally be reluctant to report themselves as highly aggressive, even if they felt this appraisal was accurate. An attempt was made to reduce this reluctance by phrasing the question so that each child was asked to describe the kinds of children who acted like he did rather than describing himself directly. This is done by prefacing each item with a prase "kids like me...." Although various items are phrased somewhat differently, the form contains the same aggressive items as those appearing on the Peer Nominations of Aggression form. Again, a number of buffer items was included to avoid biased responses on the part of the subjects. Subjects rated themselves on a four step scale for each aggression item. Scale steps were labelled: "always," "usually," "sometimes," and "never." Values ranging from one to four were assigned to each scale step, with "always" receiving the higher value and "never" the lowest value. The score received by a subject for each item was simply the scale value of the rating which the subject made.

TEACHER RATINGS OF AGGRESSION

The task set for teachers was one in which there was every reason to expect success. We asked teachers to differentiate not only between aggressive and non-aggressive children in their classes, but tell us of their observations of the fine differences in quality of expression of aggression. We said to the teachers:

"We would like you to rate your pupils on the various ways they express aggression in your contacts with them. In order to have all the ratings consistent, the different kinds of behavior are specifically described for you. Please be sure and keep these descriptions in mind when you assign ratings. Each type of behavior is to be rated on a 5-point scale."

It was anticipated that the nuances of expression of aggression were not only discernible but would be combined to fashion the form of response each teacher would make when confronted with the specter of aggression. With this goal in mind, teachers were asked to make meaningful discriminations along a series of dimensions of aggressive expression using 5 categories as follows:

1. Never or almost never
2. Seldom
3. Sometimes
4. Frequently
5. Always or almost always

The phenomena to be observed and the dimensions to be cast into these categories were as follows:

-- Fighting: Physical combat, pushing, shoving, and "horsing around."

-- Swearing and Cursing: Oaths or foul language in conversation with teachers, pupils, or others in class, halls, or elsewhere.

-- Arguing: The bitter exchange of words or opinions with teachers, or pupils in class or school.

-- Negativism: Contrariness and obstruction: In class or group activities student either does nothing, or does just the opposite of what is required, prevents others from carrying out their tasks, or "purposely" does everything wrong.

-- Meanness and "ornery" behavior: In class or group activities student is generally unpleasant in his behavior toward others; makes unfavorable remarks about others; "tears down" people or their work; goes out of his way to make life unpleasant for someone or everyone.

-- Dictatorial or monopolistic behavior: Student wants his way about everything, insists his ideas be carried out even over the protests of others; monopolizes class or group activities, giving others little chance to participate; "hogs" the show or equipment, etc.

-- Creation of general disturbance: Student writes and passes around disturbance-creating notes or exhibits other behavior obviously meant to distract the class from its purpose and perhaps to get others to do the same.

-- Provocation of aggression in others: In class or group activities is always provoking others into aggressive acts; plays role of "innocent" bystander or victim; sometimes difficult to detect provocation on this child's part; always blames others for having started the disturbance or fight.

-- Aggression in uncontrolled situations: Out of class or in less structured situations, shows more aggression than in structured setting; in lunch room, or study hall, or in hallways, etc., shows aggression of various kinds--pushing, shoving, teasing, provoking cursing, obstructing, etc.

In addition to these detailed ratings of varieties of aggression among their pupils, teachers were requested to assess each child as a whole, i.e., to form a total impression of his or her aggressiveness as follows:

-- The child as a whole: As your final rating, please rate this child according to the total impression you have of him in relation to aggressive behavior. "Aggressive" means the combination of all the various kinds of behavior previously described: fighting, cursing, and swearing, arguing, meanness and orneriness, negativism, contrariness, and obstructionism, dictatorial and monopolistic behavior, and creation of general disturbance. What kind of a child is he when it comes to aggression?

The outcome of the task assigned to these teacher-observers of aggression was interesting. We expected that the many faces of aggression--

or at least the combination of its features--would be distinguishable to the teachers; we found, instead, that aggression is subject to an intense stereotype that makes it all of one visage.

TABLE 5

Correlations of Teacher Ratings of Aggression
(Male and Female Students Combined; Grades
3-8, University School, 1961-1962)

	Fighting	Swearing	Arguing	Negativism	Mean-Ornery	Monopolistic	Disturbande Creator	Provokes Aggression	Aggression in Uncontrolled Situations	Overall Aggression Rating
Fighting										
Swearing	.72									
Arguing	.81	.60								
Negativism	.72	.64	.77							
Mean-Ornery	.76	.76	.77	.78						
Monopolistic	.64	.56	.67	.67	.66					
Disturbance Creator	.77	.68	.74	.78	.79	.72				
Provokes Aggression	.77	.75	.70	.74	.77	.67	.84			
Aggression in uncontrolled situations	.76	.66	.70	.67	.75	.66	.75	.76		
Overall aggression rating	.81	.69	.80	.77	.83	.68	.83	.84	.84	

The unparalleled set of high, positive correlations of the various facets of aggressive expression make it clear that aggression, as the teacher views it, is all of a piece. While it is conceivable that teachers could in individual interviews be pressured to distinguish aggressiveness on a less gross basis, it is also evident that, typically, aggression appears as an undifferentiated lump to the average teacher.

When continued pursuit of these ratings seeks to find differences between male and female students it is greeted with substantially the

the same conclusion. It is as if aggression in the classroom has a threshold beyond which it congeals into a single, undifferentiable mass. For teachers, the aggression of males or females when consistently present or absent constitutes a phenomenon that is not easily separated into its component elements. Comparisons of the 1961-1962 data with those obtained from the samples of 1962-1963 and 1963-1964 reaffirm this conclusion. Except for minor differences of degree, the pattern of teacher perception of aggression remains constant.

Anxiety about Aggression and Its Inhibition

In addition to the ratings of aggressiveness, teachers were asked to assess the frequency with which students appeared to be anxious about the expression of aggressive impulses: "In class or group activities reacts with anger, but reactions are short-lived; immediately feels anxious about having expressed anger; displays concern about reactions of peers and teachers to expression of anger; anger becomes "short-circuited." What is interesting about this inquiry into the existence of aggression-anxiety is that it bears such a high and positive correlation with aggressive behavior itself. While the correlations do not reach quite the same level of intensity (i.e., account for as much of the variance), their pattern is identical to that of the intercorrelation of specific dimensions of aggression. The child who the teacher judges to be anxious about aggression is one who evidently feels the same impulses as other children and may even begin an expressive outburst, but retreats at once to the safety of inhibition.

It is evident that teachers equate anxiety about aggression directly with the expression of aggression itself. That is to say that those children who are "always or almost always" aggressive are seen to be "always or almost always" subject to anxiety about aggression. By the same token, children who are "never or almost never" noted as aggressive are similarly seen as "never or almost never" the victims of aggression-anxiety.

TABLE 6

Correlations of Teacher Ratings of Aggression-Anxiety with Overt Expression of Aggression (Male and Female) Students Combined: Grades 3-8, 1961-1962, University School)

	Aggression-Anxiety
Fighting	.53
Swearing	.39
Arguing	.58
Negativism	.55
Mean-ornery	.51
Monopolistic	.54
Disturbance Creator	.55
Provokes Aggression in Others	.58
Aggression in Uncontrolled Situations	.54
Overall Aggression Rating	.64

This proves to be true, systematically, for the other years (1962-63; 1963-64) in which data were collected and for both male and female subjects. It seems that teachers judge that those who express aggression feel anxiety about it and those who are unaggressive are free of the symptom. How much these judgements represent the teacher's view of the way things ought to be rather than the way things are, is impossible to determine.

But what of the inhibition of aggression? What of the children who may have reason to be aggressive but fail to show it? We asked the teachers to assess inhibition according to this description: "In class or group activities may have reason to get angry; but doesn't show anger; inhibits expression of anger, but you know anger is (or perhaps should be) present; "swallows" his anger; extremely careful about not allowing himself to express anger; uncomfortable when anger is expressed openly by others."

It is clear (Table 7) that the inhibition of aggressive impulses is seen by teachers to be the obverse of the coin of aggression. The highest single correlation in this series attains a value of only -.33 (when contrasted with the high level of intercorrelation among the aggressive items themselves). Those who "always" or "almost always" fight, for example, are "never" or "almost never" among those who inhibit the expression of aggression.

In an attempt to probe behind this perceptual uniformity of teachers, we asked for assessments of the degree to which teachers estimated the child displayed self-satisfaction with his or her own behavior: In regard to the child's whole attitude toward himself, how satisfied does the child seem to be with himself? In his daily academic performance and social relationships, does he seem happy with himself or does he experience more failure than success? Generally, what is his attitude toward himself; how satisfied does he seem to be with himself?

Again we are confronted with a high level of perceptual uniformity on the part of teachers. Table 7 reveals that the correlations between aggression and the child's satisfaction with self is clearly congruent with the level and direction of the correlation of aggression and inhibition of aggression. In the view of our teachers, highly aggressive children are rarely happy or satisfied with themselves.

TABLE 7

Correlations of Teacher Estimates of Aggression and Inhibition of Aggression and Child's Satisfaction with Self (Grades 3-8, 1961-1962, University School, Male and Female Students Combined)

	Inhibition of Aggression	Child's Satisfaction with Self
Fighting	-.27	-.32
Swearing	-.23	-.31
Arguing	-.33	-.37
Negativism	-.20	-.50
Mean-Ornery	-.24	-.43
Monopolistic	-.28	-.33
Disturbance Creator	-.23	-.38
Provokes Aggression in Others	-.21	-.33
Aggression in Uncontrolled Situations	-.28	-.32
Overall Aggression Rating	-.31	-.39

The Socialization of Aggression

Our descriptive instructions to the teachers for this series of ratings are as follows:

> "An important part of the teacher's task is to regulate the behavior of the classroom for the good of the whole group. This necessary regulation sometimes involves criticizing or disciplining a child; sometimes it means rewarding or approving the child; and sometimes it requires keeping the child at his assigned task or interfering with activities which are not appropriate to the class. Each child in the class responds individually to your attempt to regulate the classroom. We are interested in discovering the individual differences in the responses children make to your class-regulatory activities. Please indicate for each child in your class the kind of response that is most typical in your transactions with him or her."

Code:
1. Highly positive, pleased, accepting
2. Positive, but restrained
3. Neutral, non-committal
4. Negative, but restrained
5. Highly negative, resentful, rejecting

Using this 5 point scale for ratings, teachers estimated child response along the following dimensions:

- -- Estimate the usual response of each child in your class when you find occasion to reward him (her) by a compliment or expression of approval for a job well done.
- -- Estimate the usual response of each child in your class when you find it necessary to discipline him verbally or limit him.
- -- Estimate the usual response of each child in your class when you find it necessary to criticize his work or behavior.
- -- Estimate the usual response of each child in your class when you find it necessary to interfere with his on-going activity of which you do not approve.

As tables 8 and 9 reveal, when male and female student scores are combined or when male student scores are considered alone, the intercorrelation of the various teacher ratings of pupil response to socialization is extremely high. Those who respond positively to socialization efforts by the teacher (are pleased, or accepting) tend to be as consistently so as those who regularly respond negatively.

TABLE 8

Correlations of Estimates of Pupil Response to Teacher Socialization Efforts (Grades 3-8, 1961-1962, University School, Male and Female Students Combined)

	Reward	Discipline	Criticize	Urge or Remind	Interfere
Reward					
Discipline	.44				
Criticize	.39	.69			
Urge or Remind	.50	.72	.58		
Interfere	.41	.70	.63	.71	

TABLE 9

Correlations of Estimates of Pupil Response to Teacher Socialization Efforts (Grades 3-9, 1961-1962, University School, Male Students Only)

	Reward	Discipline	Criticize	Urge or Remind	Interfere
Reward					
Discipline	.58				
Criticize	.45	.72			
Urge or Remind	.55	.74	.60		
Interfere	.57	.73	.66	.71	

The exception to this uniform picture is to be found in Table 10 in which the response to socialization of female pupils is considered. In this instance, it is evident that, for female pupils, the relationship between being rewarded and disciplined, rewarded and criticized or rewarded and interfered with, is positive but lacks significance. This suggests an independence of response such that female pupils respond differently to discipline, criticism, and interference than to reward and approval. Boys, it would appear, are viewed by teachers as not possessing a substantially differentiated response to socialization efforts of the teacher but girls who respond well to reward are not nearly as gracious regarding discipline, criticism, or interference.

TABLE 10

Correlations of Estimates of Pupil Response to Teacher Socialization Efforts (Grades 3-8, 1961-1962, University School, Female Students Only)

	Reward	Discipline	Criticize	Urge or Interfere Remind
Reward				
Discipline	.22			
Criticize	.24	.66		
Urge or Remind	.37	.70	.53	
Interfere	.08	.67	.54	.70

The intercorrelations between these variables for the years 1962-1963 and 1963-1964 present a picture of substantial agreement with these findings.

Now, what of the relationship of these responses to socialization and the teacher ratings of aggressiveness among their pupils? It is evident that using teacher rating of "aggressiveness of the pupil as a whole" as our representative measure of total aggressiveness, there is substantial agreement across the years when we combine data for male and female pupils. Table 11 for the years 1961-1962 are typical of the findings in the other two sets of years.

TABLE 11

Correlations between Ratings of Aggressiveness of the Child as a Whole and Response to Teacher Efforts at Socialization (1961-1962, Combined Male and Female, Grades 3-8, University School)

	Reward	Discipline	Criticize	Urge or Interfere	Remind
Aggressiveness: Pupil as a Whole	.26	.54	.51	.52	.65

It is apparent in Table 11 that the least aggressive children, according to the teacher, are the most responsive to the teacher's efforts at socialization.

It is clear that such children are the very ones least needful of socialization efforts and the most aggressive take socialization less gracefully.

In much the same fashion it is apparent that teachers perceive a stable relationship between the child's response to her socialization efforts and her estimate of the child's satisfaction with himself. Children who do not respond well are viewed as children who are unhappy most of the time (Table 12).

TABLE 12

Correlations Between Teacher Estimates of Response to Socialization Efforts and the Child's Satisfaction with Self (Grades 3-8, University School, Combined Male and Female, 1961-1962 Sample)

	Reward	Discipline	Criticize	Urge or Interfere	Remind
Child's Satisfaction With Self	-.16	-.47	-.45	-.53	-.48

Flint Teacher Ratings

The experiment in Flint was conducted in 1962-1963 as the sole year of control. Not all of the measures were collected in the Flint sample. For teachers, ratings were restricted to ratings of aggression among the children. The following tables tell the story.

The relationship of male alone and female alone are essentially the same as those reported above. The perception the Flint teachers have of aggression is the same as that of our teachers in Ann Arbor. Aggression seems in their view to be all of a piece and there is little differentiation of its details and its many dimensions.

TABLE 13

Correlations (Male and Female Students Combined: Two Seventh and Two Fifth Grades, Flint, 1962-1963 Sample)
Teacher Rating of Aggression

	Fighting	Swearing	Arguing	Negativism	Mean-Ornery	Monopolistic	Disturbance Creator	Provokes Aggression	Aggression in Uncontrolled Situations	Overall Aggression Rating
Fighting										
Swearing	.64									
Arguing	.90	.65								
Negativism	.75	.71	.84							
Mean-Ornery	.74	.75	.82	.87						
Monopolistic	.72	.47	.71	.58	.58					
Disturbance Creator	.84	.65	.86	.83	.85	.67				
Provokes Aggression	.79	.60	.86	.77	.71	.60	.74			
Aggression in Uncontrolled Situations	.85	.66	.87	.86	.79	.68	.84	.65		
Overall Aggression Rating	.86	.71	.90	.86	.84	.69	.89	.62	.89	

TABLE 14

Aggression-Anxiety Correlations with Overt Expression of Aggression (Male and Female Students Combined: Two Seventh and Two Fifth Grades, Flint, 1962-1963 Sample)

	Aggression-Anxiety
Fighting	.65
Swearing	.36
Arguing	.69
Negativism	.59
Mean-Ornery	.56
Monopolistic	.46
Disturbance Creator	.57
Provokes Aggression in Others	.74
Aggression in Uncontrolled Situations	.65
Overall Aggression Rating	.62

TABLE 15

Correlations of Teacher Estimates of Inhibition of Aggression and Child's Satisfaction with Self with the Overt Expression of Aggression (With Male and Female Students Combined; Two Seventh and Two Fifth Grades, Flint, 1962-1963 Sample)

	Inhibition of Aggression	Child's Satisfaction with Self
Fighting	-.05	-.04
Swearing	-.13	-.20
Arguing	-.02	-.05
Negativism	-.06	-.25
Mean-Ornery	-.16	-.20
Monopolistic	-.12	-.16
Disturbance Creator	-.14	-.11
Provokes Aggression in Others	-.03	-.02
Aggression in Uncontrolled Situations	-.04	-.18
Overall Aggression Rating	-.15	-.15

PEER NOMINATIONS AND AGGRESSION

The male and female pupils of the University School in Ann Arbor and Flint were asked to nominate fellow students as possessing or not possessing a variety of characteristics. The number of nominations each child received from his classmates was totalled and a distribution formed. The intercorrelations of these nominations were then calculated. Intercorrelations among 24 variables were calculated for the 1961-1962 sample.

In turn, this large number of variables was reduced to an even lesser number to be considered separately. Certain variables have been eliminated from consideration at the outset (i.e., who takes other people's things and forgets to return them?, who are your best friends?, who is the teacher's favorite?, and which people in the class do you like best?).

Let us begin with a consideration of what male and female pupils in these grades perceive about one another. Let us take niceness first. The general instructions read to the children were as follows:

> Most kids are pretty much the same, but all kids are not exactly alike. We want to find out what kind of kids are in the class. Each page has a question telling the way some kids are and the things some kids do. We want you to draw a line through the name of the kids in your class who are like the question. You may draw a line through more than one name if more than one kid is like the question.

TABLE 16

Correlation of Peer Nominations of Niceness and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined)

	Who is Especially Nice to Other People?
Who shares?	.71
Who is good natured?	.76
Who does the best schoolwork?	.50
Who is good at thinking of new ideas	.47
Who is careful to follow the rules?	.64
Who is the fastest worker?	.39

When these intercorrelations are examined for male pupils alone and female pupils alone for the 1961-1962 sample, the results are the same (given non-meaningful fluctuations of the actual correlation coefficients). It is apparent that "nice" pupils are those who share with others, are good natured, do the best schoolwork, are the best at thinking up new ideas, are careful to follow the rules, and are the fastest workers.

The uniformity of this judgment of "niceness" is seen even more clearly when the obverse side of the coin is examined.

TABLE 17

Correlation of Peer Nominations of Niceness and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined)

	Who is Especially Nice to Other People?
Who acts smart alecky?	-.41
Who makes it hard for others to get things done	-.46
Who pushes or shoves?	-.39
Who gets very, very mad at times?	-.26
Who argues most with everybody?	-.33
Who is most likely to get things wrong?	-.33
Who says mean things?	-.42
Who gets angry easily?	-.38
Who gets into trouble?	-.32
Who says bad things about others?	-.38
Who doesn't finish their work on time?	-.35

It is apparent that a simple black and white dichotomy exists regarding nice and not-nice pupils in the perception of their fellow pupils.

The results of Table 17 are congruent with those achieved when male pupils alone are considered but these results are not identical to those for female pupils considered as a group. The exceptions are that a series of correlations fail to achieve significance. Thus, girls who are not seen as nice are not necessarily seen as being smart alecks (-.21), do not get very, very mad at times (-.19), do not argue with everybody (-.17), and do not get into trouble (.00). All other variables coincide with those reported in Table 17. For girls, the lack of niceness does not always mean the possession of highly negative characteristics.

The degree of negative halo or stereotypy evident in pupil ratings of one another can, perhaps, best be illustrated by a consideration of those characteristics assigned to pupils who are seen as the class smart alecks. The systematic bias is clearly evident in Table 18.

Being the fastest worker, having the most new ideas, always wanting to give the answers, and getting others to do things for them bear no significant relationship to being the class smart aleck. The role of smart aleck is not a very rewarding one.

When male pupils alone are examined regarding ratings of smart aleck, the results are identical to those for combined male and female pupils. The pattern of intercorrelations among female pupils considered alone differ along two dimensions: 1) In some aspects the correlations account for less of the variance although the direction is the same and 2) some of the correlations fail to achieve significance. Table 19 reveals the essential differences.

Female pupils again differ from males and from joint consideration of male and female scores and they differ primarily in terms of less severe academic and social censure from their fellow students.

TABLE 18

Correlation of Peer Nominations of Smart Aleck and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined)

	Who acts Smart Alecky?
Who says funnier things than other kids do?	.45
Who makes it hard for others to get things done?	.78
Who pushes or shoves?	.83
Who gets very, very mad at times?	.61
Who argues most with everybody?	.73
Who is most likely to get things wrong?	.53
Who says mean things?	.85
Who gets angry easily?	.57
Who gets into trouble?	.88
Who says bad things about others?	.80
Who doesn't finish their work on time?	.57
Who is especially nice to other people?	-.41
Who shares what they have?	-.36
Who is good natured?	-.33
Who does the best schoolwork?	-.31
Who is careful to follow the rules?	-.57

TABLE 19

Correlation of Peer Nominations of Smart Aleck and Other Variables (University School; 1961-1962; Grades 3-8; Female Only)

	Who Acts Smart Alecky?
Who says funnier things than other kids do?	.24
Who makes it hard for others to get things done?	.56
Who pushes or shoves?	.62
Who gets very, very mad at times?	.57
Who argues most with everybody?	.67
Who is most likely to get things wrong?	.25
Who says mean things?	.75
Who gets angry easily?	.68
Who gets into trouble?	.66
Who says bad things about others?	.56
Who doesn't finish their work on time?	.28
Who is especially nice to other people?	-.21
Who shares what they have?	-.27
Who is good natured?	-.23
Who does the best schoolwork?	-.19
Who is careful to follow the rules?	-.40

Another interesting variable is that of interpersonal influence, i.e., who can get others to do things for them. Table 20 tells the story.

One interesting observation is that the capacity to influence others by getting them to do things for you bears no significant negative relationship with any of the other variables under consideration. Of additional interest is the fact that interpersonal influence is not significantly related to a series of variables (if we take a correlation of .30 as a reliable indicator of significance at the .01 level) i.e., it bears no significant relationship to being nice, being a smart aleck, making it hard for others to get things done, sharing things, always wanting to give the answers, pushing, or shoving, getting things wrong, being easily angered, always following the rules, getting into trouble, and not finishing one's work.

Using .30 as a correlation level for significance of relationship, we find that influencing others is positively related to saying funny things, being good natured, getting very, very mad at times, doing the best school work, arguing with others, being able to get new ideas, saying mean things about others, being the fastest worker, and saying bad things about others. These correlations paint a fascinating picture of a mixture of academic-intellectual capability and violent temperament along the lines of domination of others and independent behavioral reaction.

TABLE 20

Correlation of Peer Nominations of Interpersonal Influence and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined)

	Who Can Get Others to Do Things for Them?
Who is especially nice to people?	.17
Who acts smart alecky?	.20
Who says funnier things than other kids do?	.30
Who makes it hard for others to get things done?	.14
Who shares what they have?	.25
Who is good natured?	.40
Who always wants to give the answers?	.28
Who pushes or shoves?	.27
Who gets very, very mad at times?	.41
Who does the best schoolwork?	.30
Who argues most with everybody?	.31
Who is most likely to get things wrong?	-.05
Who is good at thinking up new ideas?	.41
Who says mean things?	.34
Who gets angry easily?	.27
Who is careful to follow the rules?	.05
Who is the fastest worker?	.36
Who gets into trouble?	.26
Who says bad things about others?	.38
Who doesn't finish their work on time?	.03

TABLE 21

Correlation of Peer Nominations of Interpersonal Influence and Other Variables (University School; 1961-1962; Grades 3-8; Male Only)

	Who Can Get Others To Do Things for Them?
Who is especially nice to people?	.13
Who acts smart alecky?	.24
Who says funnier things than other kids do?	.32
Who makes it hard for others to get things done?	.13
Who shares what they have?	.20
Who is good natured?	.32
Who always wants to give the answers?	.12
Who pushes or shoves?	.35
Who gets very, very mad at times?	.50
Who does the best schoolwork?	.17
Who argues most with everybody?	.39
Who is most likely to get things wrong?	-.07
Who is good at thinking up new ideas?	.26
Who says mean things?	.40
Who gets angry easily?	.30
Who is careful to follow the rules?	.06
Who is the fastest worker?	.19
Who gets into trouble?	.36
Who says bad things about others?	.47
Who doesn't finish their work on time?	.06

TABLE 22

Correlation of Peer Nominations of Interpersonal Influence and Other Variables (University School; 1961-1962; Grades 3-8; Female Only)

	Who Can Get Others To Do Things for Them?
Who is especially nice to people?	.25
Who acts smart alecky?	.13
Who says funnier things than other kids do?	.37
Who makes it hard for others to get things done?	.16
Who ahares what they have?	.34
Who is good natured?	.50
Who always wants to give the answers?	.44
Who pushes or shoves?	.19
Who gets very, very mad at times?	.29
Who does the best schoolwork?	.46
Who argues most with everybody?	.20
Who is most likely to get things wrong?	-.09
Who is good at thinking up new ideas?	.57
Who says mean things?	.30
Who get angry easily?	.22
Who is careful to follow the rules?	.09
Who is the fastest worker?	.53
Who gets into trouble?	.15
Who says bad things about others?	.28
Who doesn't finish their work on time?	-.04

In what respects do male and female pupils, when considered separately, differ in the correlation of influence and other variables? For the girls, influence is more closely aligned (in the judgment of their peers) with qualities such as sharing, wanting to give the answers in class, doing the best schoolwork, and being good at thinking up new ideas. Influence is less powerfully associated with pushing or shoving, getting very, very mad, arguing, becoming angry easily, getting into trouble, or saying bad things about others. Their fellow pupils, thus, differentiate two kinds of influence--that stemming from overt aggression (predominately male) and that stemming from the pursuit of academic and intellectual expression.

The class humorist constitutes another interesting study primarily because he is not seen as an unmixed blessing to his classmates. This occurs because those who "say funnier things than others" tend also to be hostile.

The list of those characteristics which bear no relationship to being the class humorist are equally interesting. For example, the funny sayers of class are not seen as those who are particularly nice, who share, are good natured, do the best school work, have the most new ideas, follow the rules, or work fast. It seems apparent their energies are directed in less than satisfying academic channels.

Who gets into trouble in the classroom? In the perceptions of their peers, such persons have clear cut, highly intercorrelated characteristics.

TABLE 23

Correlation of Peer Nominations of Who Says Funnier Things Than Others? and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined)

	Who Says Funnier Things Than Others?
Who acts smart alecky?	.45
Who makes it hard for others to get things done?	.40
Who pushes or shoves?	.31
Who argues most with everybody?	.39
Who says mean things?	.35
Who gets into trouble?	.45
Who says bad things about others?	.36

TABLE 24

Correlation of Peer Nominations of Who Gets Into Trouble and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined)

	Who Gets Into Trouble
Who is especially nice to people?	-.32
Who acts smart alecky?	.88
Who says funnier things than other kids do?	.45
Who pushes or shoves?	.86
Who makes it hard for others to get things done?	.76
Who gets very, very mad at times?	.63
Who does the best schoolwork?	-.32
Who is most likely to get things wrong?	.54
Who argues most with everybody?	.71
Who says mean things?	.82
Who gets angry easily?	.54
Who is careful to follow the rules?	-.55

Totally, they constitute an unappetizing set of characteristics and they are sufficiently homogeneous to suggest a stereotype. The findings for the male sample taken alone are the same as those reported in Table 24. The results for females considered alone differ somewhat from those of males alone or males and females combined.

TABLE 25

Correlation of Peer Nominations of Who Gets Into Trouble and Other Variables (University School; 1961-1962; Grades 3-8; Male Only and Female Only)

	Who Gets Into Trouble?	
	Female Only	Male Only
Who is especially nice to people?	.00	-.38
Who does the best schoolwork?	-.09	-.42
Who is most likely to get things wrong?	.28	.50
Who is careful to follow the rules?	-.21	-.59
Who is the fastest worker?	-.06	-.34

Females who are seen as getting into trouble may or may not be seen as nice (where males are seen as not being nice), may or may not do the best schoolwork (where males are seen as not doing well), may or may not get things wrong (compared to males), may or may not follow the rules (males don't follow rules), may or may not be the fastest workers (males don't work fast). Trouble for females is not identical to trouble for males.

TABLE 26

Correlation of Peer Nominations of Who Is Good at Thinking Up New Ideas and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined)

	Who is Good at Thinking Up New Ideas?
Who is especially nice to people?	.47
Who can get others to do things for them?	.41
Who shares what they have?	.52
Who is good natured?	.58
Who always wants to give the answers?	.53
Who does the best schoolwork?	.77
Who is most likely to get things wrong?	-.39
Who is careful to follow the rules?	.57
Who is the fastest worker?	.72
Who doesn't finish their work on time?	-.34

How do students see the most creative among them? Our findings would indicate that those who are good at thinking up new ideas are also extremely well adapted to the educational system.

An astounding collection of characteristics indeed. Interestingly, these creative ones (in the perception of their fellows) may or may not act smart alecky, say funny things, make it hard for others to get things done, push or shove, get into trouble, or say bad things about others. There is considerable latitude allowed for creativity. These results apply equally to male and female pupils considered separately.

One of the most systematically consistent set of correlations exists for the pupils who are seen as always following the rules (Table 27).

This constitutes a perfect picture of conformity and needs no elaboration.

TABLE 27

Correlation of Peer Nominations of Who is Careful to Follow the Rules and Other Variables (University School; 1961-1962; Grades 3-8; Male and Female Combined)

	Who is Careful to Follow the Rules?
Who is especially nice to people?	.64
Who acts smart alecky?	-.51
Who makes it hard for others to get things done?	-.56
Who shares what they have?	.59
Who is good natured?	.54
Who always wants to give the answers?	.31
Who pushes or shoves?	-.57
Who gets very, very mad at times?	-.40
Who does the best schoolwork?	.68
Who argues most with everybody?	-.42
Who is most likely to get things wrong?	-.48
Who is good at thinking up new ideas?	.57
Who says mean things?	-.52
Who gets angry easily?	-.44
Who is the fastest worker?	.53
Who gets into trouble?	-.55
Who says bad things about others?	-.50
Who doesn't finish their work on time?	-.54

SELF RATINGS

When the children are asked to rate themselves along those dimensions they used to rate one another (Peer Nominations), a series of ratings are made using the categories always, usually, sometimes, and never. As we will see (in the Self-Satisfaction measures) when asked to assess the degree to which they are satisfied with themselves, a scale of "a lot too often," "too often," "about the right amount," "not often enough," and "not nearly often enough" is used. Thus, true satisfaction with one's self is best expressed by feeling that one possesses characteristics "about the right amount," extreme dissatisfaction would be categorized as "a lot too often" or "not nearly enough," while moderate dissatisfaction would be "too often" or "not often enough."

When we examine the correlations of student self-ratings of characteristics, we find the following:

TABLE 28

Correlation of Pupil Self Ratings Along 22 Dimensions
(1961-1962 Sample; University School; Grades 3-8;
Combined Male and Female)

	Kids Like Me Are Especially Nice to Other People
Kids like me act smart alecky	-.32
Kids like me make it hard for others to get things done	-.34
Kids like me share what they have	.43
Kids like me are good natured	.37
Kids like me push or shove	-.35
Kids like me do good school work	.32
Kids like me say mean things	-.36
Kids like me get angry easily	-.27
Kids like me are careful to follow the rules	.31
Kids like me say bad things about others	-.30

The combination of these negative and positive correlations makes it clear that even in self evaluations children are aware of which characteristics belong together and which do not. The correlations that do not achieve significance when matched with "niceness" are especially important.

TABLE 29

Correlation of Pupil Self Ratings Along 22 Dimensions
(1961-1962 Sample; University School; Grades 3-8;
Combined Male and Female)

	Kids like Me are Especially Nice to Other People
Kids like me take other people's things and forget to return them	-.22
Kids like me can get others to do things for me	.16
Kids like me say funnier things than other kids do	-.02
Kids like me want to give the answer	.20
Kids like me get very, very mad	-.16
Kids like me argue with everybody	-.13
Kids like me get things wrong more than other kids do	-.09
Kids like me are good at thinking up new ideas	.10
Kids like me work fast	.25
Kids like me get into trouble	-.25
Kids like me don't finish their work on time	-.16

The pattern of self-ratings of those who feel they get into trouble with peers and teachers is also revealing of self-image patterning.

TABLE 30

Correlation of Pupil Self Ratings Along 22 Dimensions
(1961-1962 Sample: University School; Grades 3-8;
Combined Male and Female)

	Kids Like Me Get Into Trouble
Kids like me are especially nice to other people	-.25
Kids like me act smark alecky	.41
Kids like me take other people's things and forget to return them	.26
Kids like me make it hard for others to get things done	.37
Kids like me are good natured	-.31
Kids like me push or shove	.33
Kids like me get very, very mad	.28
Kids like me do good schoolwork	-.32
Kids like me argue with everybody	.28
Kids like me say mean things	.29
Kids like me get angry easily	.28
Kids like me are careful to follow the rules	-.33
Kids like me say bad things about others	.32

Those students who most often get new ideas show no correlation with the other variables reflecting self-ratings. Those most anxious to give the answers in class show no substantial intercorrelations with other variables. Influencing others shows the same lack of consistent patterning.

Self Esteem and Aggression

The part of this study devoted to measures of Self-Ratings and Satisfaction with Self led naturally to the exploration of the relationship of self-esteem and perceived aggressiveness. The study reported here was an early version of the kind of direction we intended to pursue in the work of Dr. Morse to be reported in Part II and Part III.

Silverman's theoretical orientation and rationale for matching aggression to self-esteem can be made clear by explaining existing theoretical views of self-esteem and of aggression, the relation of these to socio-economic class status.

Self-Esteem

There appears to be consensus among most social scientists about the development of self-esteem. Self-esteem is usually viewed as a learned set of values and attitudes which a person has toward himself. Whether learning occurs through reinforcement or through identification, the ways in which people regard and respond to the child come to be taken over or internalized by him. Since the parents have very close and extended contact with the child during his early years, parental attitudes are of primary importance in this learning process. If the parents love their child, for example, then the child comes to see himself as lovable. The development of self-esteem becomes much more complicated because of factors such as the imperfect perceptual and cognitive abilities of young children and the influence of early learning on subsequent learning. However, the idea that self-esteem is a product of social learning in which parental "teachings" are a powerful initial influence seems to be generally agreed upon.

The primary area of disagreement lies in the degree to which self-esteem or the self-concept influences behavior. In the development of psychoanalytic theory, Freud (1959) attributed major significance to the drives and the defenses which are erected against them. The role of self-esteem as a motivational force or as a central construct is least apparent in classical psychoanalytic theory.

The contributions of the "ego psychologists" occupy an intermediate position between that of Freud and the views held by the "self" theorists. It is important to bear in mind that ego psychology is not a distinct theory, but rather is a name given to an assortment of developments in psychoanalysis. There seem to be two main lines of thought. One consists of a more detailed and thorough investigation of the function of the ego, entirely within the framework of the psychoanalytic conception of drive motivation. Anna Freud (1946), for example, has elaborated upon the defensive function of the ego within the context of psychosexual development and classical conceptions of libidinal and aggressive energy. Hartmann, Kris, and Loewenstein (1949) have maintained that there is a "conflict-free ego sphere" in which the ego engages in activities that are independent of the sexual and aggressive drives. The ego does not have an independent source of energy but must rely on aggressive energy which can be transformed or "neutralized." Hartmann et al. have attempted to expand the motivational basis of behavior while at the same time remaining within the limits of Freud's dual instinct theory.

Another approach is represented by writers such as Hendricks (1943) and White (1959), who view the ego as an independent source of motivation. They have spoken of the "instinct to mastery," and the motive of "competence," the sources of which are neither sexual nor aggressive. The relevance of these developments for self-esteem lies in the fact that if self-esteem resides anywhere in the Freudian concept of psychic structure, it must reside in the ego. Most writers in ego psychology do not usually refer to self-esteem or to self-concept. However, the expansion of the motivational basis of behavior from the id to the ego opens the possibility of increasing rapprochement between self-theory and psychoanalytic theory.

Within the last fifteen or twenty years personality theories have been developed in which the concept of the self is central. While the ego psychologists have insisted upon elevating various ego-motives to positions of importance comparable to sexual and aggressive drives, self-theorists have gone further in emphasizing the primacy of the self as a motivational construct. Lecky (1945), for example, developed a theory based upon self-consistency in which the individual strives for integrated percepts of himself and the outside world. The growing importance of self-perception and its relationship to the perception of external events can be seen in the works of Festinger (1957), Blake and

Ramsey (1950), and Snygg and Combs (1949). Perhaps more than any other theorist, Rogers (1951) has emphasized the central and critical nature of self-esteem or self-regard in its implications for the growth of personality.

Disagreement also exists in regard to the importance of the conscious as opposed to the unconscious self-image. Symonds (1950, for example, has held that an individual's unconscious self-image not only may be very different from his conscious self-image but exerts a much more powerful influence. In contrast, Rogers (1951) and Snygg and Combs (1949) emphasize the significance of the individual's conscious perceptual organization.

Aggression

Freud has been one of the most influential theorists in this area, but it is difficult to summarize briefly Freud's thinking about aggression because it is so deeply intertwined with his total theory of personality. In essence, however, Freud (1930) conceived of an aggressive instinct which, combined with the sexual instincts, comprises the basic motivational force of all people. Aggressive energy constantly seeks discharge, and the pressure which it exerts is relatively constant and independent of environmental conditions. Energy which is denied release at one point in the system "flows" to another outlet seeking discharge. Defenses are established against both the awareness of aggressive impulses and their expression. Internalized standards against aggression serve as the basis for guilt, or "moral anxiety"; fear of being overwhelmed by instincts gives rise to "neurotic anxiety"; and concern over retalization from others for instinctual behavior gives rise to "objective anxiety."

Recent contributions to the psychoanalytic literature have introduced some modifications of the original Freudian position. Although they remain within the classical instinct framework, both A. Freud (1949) and Hartmann et al. (1949) have emphasized the socially constructive uses to which "neutralized" aggressive energy can be applied. Freud frequently referred to defenses against aggression, but an interesting development has been the recognition that aggression itself can be used as a defense. Delinquents, for example, may use aggression in order to ward off the possibility of close interpersonal relationships (Block, 1952). Slavson (1943) has pointed out that boys with feminine identifications may act aggressively in order to prove to themselves, or others, that they are truly masculine.

The frustration-aggression hypothesis of Dollard, Doob, Miller, Mowrer, and Sears (1939) has been another particularly influential theory. The core of the hypothesis is that frustration always leads to some form of aggression and that aggressive behavior "presupposes" some form of frustration. Frustration is defined as interference with goal responses, or more simply, preventing someone from doing what he wants to do. The frustration-aggression hypothesis points to a number of variables which influence the nature of the aggressive response. Broadly speaking, aggression is the resultant of the forces of expression and inhibition. Fear of the consequences of expressing aggression leads to inhibition, which may either prevent any aggressive response or which may lead to the displacement of aggression onto objects different from the original instigator. The expression of aggression acts as a catharsis, so that unless the original source of frustration is still operative, the expression of aggression reduces the instigation to renewed aggression.

Dollard et al. expressly avoid taking a stand on the question of the instinctual basis of aggressive tendencies. Certainly the importance of frustration which necessarily occurs through interaction with the environment implies that there is not an innate aggressive force that is independent of external stimulation. On the other hand, the notion of catharsis strongly implies a specific energy base for aggression.

There is a critical distinction among the theoretical approaches that have been listed which is important to emphasize. In the psychoanalytic-energy model, as well as in the frustration-aggression hypothesis, the individual is obliged to cope, as well as he is able, with powerful aggressive response tendencies. In the perspectives which stress adaptation and the more psychologically-based motives of competence, self-consistency, and self-esteem, aggression becomes one of a number of devices which the individual makes use of in order to attain a variety of goals.

Theoretical Relationships

In general, it is expected that children with low self-esteem will be more aggressive than children with high self-esteem. The child who has low self-esteem may be presumed to be an individual who has experienced rejection and "negative regard." From the point of view of the frustration-aggression hypothesis, children who have had their dependency needs frustrated, as well, perhaps, as their needs for competence or mastery, should be more aggressive than children who have experienced few frustrations in these areas. The rejected child may often want to retaliate against the world which has treated him so badly. He may envy the affection and approval received by other children and be predisposed to punish adults generally for their real or fantasied mistreatment of him.

Theoretical approaches which emphasize the influence of perceptual organization upon behavior lead to similar predictions. An individual with low self-esteem will find it hard to believe that other people value him, because he sets such a low value upon himself. The anticipation of rejection or criticism serves to heighten the likelihood of aggressive responses. Individuals with high self-esteem have presumably had more love and acceptance, so that they will anticipate liking from others and consequently have less reason to be aggressive.

It is important to note that some amount of aggression meets with a degree of social approval. In a study of pre-adolescent children, for example, Pope (1953) found that the extremely non-aggressive "sissy" met with severe rejection in both the middle and lower class. Therefore, while a relationship between self-esteem and aggression is expected, other factors, such as group norms, could operate to lower the strength of the relationship. The possible effect of social class upon the relationship between self-esteem and aggression is explored later in this chapter.

Empirical Evidence

As suggested earlier, direct experimental evidence of the relationship between self-esteem and aggression is very sparse. In one study (Rosenbaum and DeCharms, 1960), it was found that subjects with low self-esteem tended to be more aware of, and sensitive to, criticism. The awareness appeared to lead to a stronger hostile attitude than was the case for high self-esteem subjects, but there was no difference in the behavior between the two groups. These results give some support to the assumption that low self-esteem individuals may anticipate rejection.

Studies of child rearing have turned up important findings which bear indirectly on the relationship between self-esteem and aggression. Sears, Maccoby, and Levin (1957) found that aggressive children came from homes where there was general parental anxiety, unhappiness, and dissatisfaction. Maximum aggression resulted when children were punished severely for aggression, but where their parents were rather permissive about it prior to its occurrence. Children showing the least aggression had parents who gave low permission for aggression but were not punitive after it had taken place. In an experiment in a nursery school, Chasdi and Lawrence (1955) observed that children who were aggressive experienced high frustration and high punishment at home. McCord and McCord (1961) found that aggressive boys usually had punitive, rejecting parents who were inconsistent in their use of discipline.

The relevance of these studies lies in the similarity between the conditions which give rise to high aggressiveness and the conditions which are theoretically expected to give rise to low self-esteem. In one study, Jourard and Remy (1955) found a correspondence between undergraduates' attitudes toward themselves and the attitudes which they felt their parents had toward them, but there is no way of concluding which is the antecedent variable. Helper (1958) found a "slight but real tendency" for agreement between children's attitudes toward themselves and the parents' attitudes toward their children. Unfortunately, there are very few studies relating child-rearing conditions to the development of self-esteem. Helper (1958) has suggested that because the theoretical connection between parental attitudes and behavior and the development of the self is so well accepted, few people have believed it worthwhile to investigate.

There are clinical observations (Redl and Wineman, 1951) which indicate that highly aggressive children frequently have very low self-esteem. Observations of this type, however, are made of highly deviant populations, which, combined with the lack of any experimental controls, limit their utility.

On the whole, it is apparent that the empirical evidence relating self-esteem and aggression is relatively weak. However, theoretical deductions clearly suggest the existence of a relationship and these deductions are supported by the available experimental data.

The Influence of Social Class

Although the evidence is not as clear as it was once regarded, it appears that there is somewhat more permissiveness and approval for aggression in the lower class than the middle class (Davis, 1947; Aberle and Naegele, 1952; Havighurst and Taba, 1949). To the extent that this is true, it would suggest that the inhibitions against aggression are weaker in the lower class than in the middle class. Social sanctions should be fewer and less severe for the lower-class child, and his conscience should be more tolerant of aggression.

The significance of these observations for the relationship between self-esteem and aggression is two-fold. First, the inhibition of aggression may be more important for the middle-class child in maintaining his self-esteem than it is for the lower-class child. Secondly, lower-class children with high self-esteem may be aggressive simply out of conformity to group norms, defying teachers, for example, in order to maintain status with peers. Both of these factors suggest that the relationship between self-esteem and aggression should be much stronger in the middle class.

Additional evidence bearing on this question can be found in studies by Miller and Swanson (1960) and Sears et al. (1957), who found that psychological means of discipline (which is more common in the middle class), as opposed to corporal means of discipline (which is more common in the lower class), were associated with stronger superego development and stronger inhibitions against aggression.

The conclusion should not be drawn that aggression meets massive social approval in the lower class. Miller and Swanson (1960) have pointed out that "aggression is subject to considerable socialization in all segments of the society." In a study of the relationship between aggression and sociometric choice, Pope (1953) found that while some highly aggressive children in the lower class did have high prestige, most children in both the lower and middle class who were popular and accepted by their peers were not highly aggressive.

There have been no studies which included the variables of self-esteem, aggression, and social class. Studies of the relationship between self-esteem and social class have either revealed no differences (Hill, 1957) or have yielded inconclusive results (Mason, 1954). For many years, social scientists accepted the notion that lower-class children were more aggressive than middle-class children. The experimental evidence, however, does not yield a very clear picture. McKee and Leader (1955) found lower-class pre-school children to be more aggressive than middle-class children, while Levin and Sears (1956) found no difference. Miller and Swanson (1960) found class differences only when the type of parental discipline was controlled.

Special Research Problems

Self-Esteem

One of the particular difficulties in research on self-esteem is created by the tendency of most people to try to put themselves in the best possible light and avoid making public admissions of their weaknesses or limitations. At the same time, a number of investigations have demonstrated that most people agree on what personality characteristics are socially desirable (Edwards, 1953). Taken together, these observations suggest that many subjects may respond to self-esteem tests in a way which will make them appear socially acceptable. As in the measurement of any intra-psychic variable, there are no external validating criteria so that it becomes extremely difficult to discriminate between the phenomenal self-esteem and the reported self-esteem, or self-concept. A pertinent experiment in this regard was done by Davids (1955). A control group was administered a battery of "adjustment" tests and told that the research was for scientific purposes. The experimental group received the same tests but was told that their performance would affect their chances of obtaining interesting, well-paid employment. The results revealed that the experimental group had significantly higher adjustment scores. Since it is relatively easy for subjects to make themselves "look good" on questionnaires, it is particularly important to control experimental conditions, such as instructions, in a way which serves to decrease the defensiveness of subjects.

Self-esteem is frequently considered to be a uni-dimensional concept. It seems reasonable to assume, however, that there are a large number of opinions and evaluations which comprise self-esteem. Since any instrument necessarily has a limited number of items, it is possible that the more crucial or central self-attitudes will not be tapped. That is, the selection of items can impose the experimenter's frame of reference on the subject. A similar danger can be seen in the use of the Q sort---one of the more popular instruments used to measure self-esteem (Butler and Haigh, 1954). The typical procedure requires subjects to sort self-descriptive cards into normal or near normal distributions. In one study, however, when free choice was allowed, most subjects sorted cards into a "U" shaped distribution (Jones, 1956).

Aggression

As in the case of self-esteem, aggression is often treated as if it were a homogeneous variable. It is a commonplace observation, though, that aggression can and does take a large number of different forms, ranging from overt physical violence to the most subtle verbal innuendo. It seems safe to assume that almost all children are aggressive in different ways at different times, so that it would be uncommon to find a child, for example, who only fights with other children but never argues with them. More likely, there are certain patterns or types of aggression which tend to cluster together. McNeil (1962), for example, found that swearing is usually accompanied by fighting, among disturbed and delinquent pre-adolescent children.

Buss (1961) has reviewed a number of inventories that have been developed to measure "aggression." Almost all of these instruments, however, measure a compound of aggressive tendencies and hostile, resentful attitudes. With the exception of the McNeil study cited, there has been almost no research relating different types of aggressive behavior. In fact, descriptive categories for aggression have only recently been developed (Buss, Durkee, and Baer, 1956; Buss and Durkee, 1957). It seems rather clear that considerable research is needed before aggression can be accepted as a global behavioral characteristic .

It has been the rule in past research to obtain only a single measure of aggression. In those instances where a second measure was obtained, it usually consisted of a projective test from which an estimate of fantasy aggression was inferred. There appears to be a great deal of merit in securing a variety of measures of aggression from different sources. In a school setting, for example, classmates and teachers may have different perceptions of a child's behavior. The child may "know" more about his behavior than anyone else, although he may be inaccurate in judging the effects of his behavior on others. Classmates may be more aware of the effect of the subject's behavior on them, but their judgments can be influence by their like or dislike of the subject. Perhaps teachers can make more impartial judgments, but they may not be in a position to observe the total range of a subject's behavior. Securing ratings from a number of sources offers the kind of comprehensive measurement of aggression which is rarely found in the research literature.

Another problem which has plagued experimenters is that of differentiating between reduced aggression that results from lowered drive, and reduced aggression that results from increased inhibition. A number of experiments have demonstrated that there is a reduction of aggression following acts of aggression (Feshbach, 1961; Siegel, 1956), but no experimental design has been found which can clearly attribute the decrease to either the effects of catharsis or to the effects of increasing anxiety over aggression. In field studies of aggression, there is a similar problem in determining whether subjects who are low in aggression are highly inhibited or simply not very hostile.

Silverman (1963) used a selected sub-population from the Ann Arbor and Flint sample to make an investigation of different forms of aggression and the relationship to self esteem in middle and lower class children.

Measurements of aggression were made by classmates, teachers, and the subjects themselves and a priori categories of direct verbal, direct physical, and indirect aggression guided the construction of the instruments. The procedure for the study involved first the reporting and interpretation of a factor analysis of a series of different aggression items used by the three different raters of aggression i.e. the children

Silverman (1963) used a selected sub-population from the Ann Arbor and Flint sample to make an investigation of different forms of aggression and the relationship to self esteem in middle and lower class children.

Measurements of aggression were made by classmates, teachers, and the subjects themselves and a priori categories of direct verbal, direct physical, and indirect aggression guided the construction of the instruments. The procedure for the study involved first the reporting and interpretation of a factor analysis of a series of different aggression items used by the three different raters of aggression, i.e., the children themselves, the teachers, and the child's peers. Then, the correlations between selected aggression items (really factor indicators) and self-esteem scores are reported.

Two measures of self esteem were employed. One was the Coopersmith Self Esteem Inventory (1954). This is an inventory adapted from one originally used by Rogers and Dymond some years ago. It is made up of 58 questions each of which is a form of self descriptive statement. The subject is required to indicate whether he usually feels each statement is "like me" or "unlike me." The statements used cover four broad areas--home, self, school, and social--areas considered to encompass the most significant concerns of children. There are fifty questions in this inventory which refer to self esteem with eight items comprising a "lie scale." (Appendix C).

A second measure of self-esteem was the Semantic Differential. This measure (Osgood, Suci, and Tannenbaum, 1957) asks the child to rate himself along a series of dimensions such as good--bad, large--small, beautiful--ugly, clean--dirty, lazy--hard working, etc. Correlations between the two measures of self esteem were high, positive and statistically significant, for both the Flint and Ann Arbor samples. (Appendix D).

A broad summary of the conclusions reached by Silverman was:

1. That teachers and classmates are in closer agreement with each other in the perception of subject's behavior than either of them are with subject's description of his own behavior. This is equally true for both social classes.

2. Teachers and classmates tend to perceive most forms of aggressive response as clustering together. This appears to be slightly more true for the lower class sample.
3. In describing their [illegible] aggression, subjects make stronger differentiations between forms of aggressive response than do classmates or teachers who describe the aggression of others. This trend is more pronounced in the middle class sample.

In order to test his hypothesis, correlations were obtained between the measures of self esteem and those of aggression. It was possible to use summary scores of the measures of aggression since teachers and classmates generally perceived them as occurring together. Silverman concluded that:

1. A negative relationship exists between self esteem and aggression in the middle class sample.
2. There is no relationship between self esteem and aggression in the lower class sample.
3. In the middle class sample, some forms of self-perceived aggressive responses have a strong negative relationship to self esteem, while others have no relationship. Aggression related to affective states which imply loss of control, has the strongest negative relationship.
4. There seemed to be no fundamental difference in self esteem between the lower and middle class sample.

Silverman anticipated that children with low self esteem would be more aggressive than children with high self esteem. He reasoned that the child who has low self esteem may be presumed to be an individual who has experienced rejection and negative regard by others. In general, children who have had their needs for confidence or mastery or dependency frustrated in the course of life should be more aggressive than children who have experienced few such frustrations. Any individual with low self esteem will find it hard to believe that other people value him. He will tend, rather, to see other people valuing him in much the same way that he sets a low value upon himself. In turn, individuals with high self esteem would expect acceptance from others and have less need to be aggressive.

When the hypothesis that lower class subjects would be more aggressive than middle class subjects was explored, results proved interesting. Silverman discovered that there were no significant differences in aggression as measured by peers or as measured by the subjects rating themselves. There was a significant difference in the ratings by teachers but not in the direction predicted. There is no difference in the amount of physical aggression expressed in the item "who pushes or shoves" or "who fights" between the two social classes at least in the perception of peers or when subjects judge themselves.

There are several comments which support this finding. First, it should be noted that a child's behavior in a classroom is not necessarily representative of the total universe of his behavior. This is especially true since schools and classrooms may vary substantially in the degree of aggression which they are able to tolerate. We have no evidence that the lower class children whom we studied were drawn as a sample from schools that were either highly permissive or highly controlled. We do know that to a certain extent university schools tend regularly to be "more progressive" and may have a higher tolerance for expression of all kinds of aggression. It probably has greater truth to it to say that the teachers in our middle class sample are unusually oriented to "problems" of students and that the mental health orientation of a university school would make it more sensitive to the appearance of aggression and more concerned about it when it does occur.

Part II

Dimensions of Children's Social and Psychological Development Related to School Achievement

The second part of this combined research endeavor has been reported in much greater detail elsewhere (Morse, W. C. and Ketcham, W. A. Dimensions of Children's Social and Psychological Development Related to School Achievement. 1965, Cooperative Research Report #1286, Office of Education, U. S. Department of Health, Education, and Welfare). A brief recounting of the design of the research, its instrumentation, and its conclusions will suffice here to set the stage for the findings to be reported (Part III) interrelating this study of aggression in the classroom and the dimensions of social and psychological development reported by Ketcham and Morse. What is to follow is an abridgement of their 1965 report.

THE NATURE AND PURPOSE OF THE STUDY

OVERVIEW

In certain ways, educational psychology has been of direct assistance to classroom teachers, but the major claim to usefulness is indirect. The problem is that a teacher conducts the amorphous educational enterprise in a conglomerate group, his classroom. That the teacher needs to understand individual pupils goes without argument. Yet of equal importance is this matter of how these pupils function and interact in the classroom unit.

Teachers frequently remark on the differences between one class and another, on changes which take place in a class over a year's period, or on what happens when membership changes involve even a few students if they are critical ones. Classes develop reputations for being "good," "bad," or "so-so." What kind of reality is behind these reputations? Is this character a self-fulfilling phenomenon which would abide change or does it reside deep in the substrata of the interactive process? In short, teachers talk about their classes as if each has some overriding personality or nature.

Teacher-psychologist planning sessions soon ran short of data. Usually there was semi-adequate information available on learning potential, though stated in very general terms. And there was often information on academic achievement. We could thus describe classrooms with regard to so called academic potential and achievement indicating the mean, range and character of the distributions. The classes, of course, differed and such differences were useful in appraising certain class phenomena. But at this point we ran out of codified information and depended upon the vaguest of observations and inuendos. The need to know more led to the present study.

The aim is to provide more tools for systematic classroom analysis for the teacher rather than principally for the researcher, although there is no implication of a conflict of interest. In consulting with teachers, it became clear that the elements which concerned them, and particularly the conceptual formulation of these elements, would have to reflect the actual situations which teachers face day by day. They were interested in appraising how effectively the learning process was staged, what social patterns evolved, and certain mental health aspects of the classroom. They were interested in their own input, both from the level of philosophy and moment by moment practice. They were interested in the nature of their pupils, with more implied than the IQ and Achievement levels alone. In short, they were interested in dimensions of pupil behavior which could be woven into a total classroom complex.

The interest is in descriptive dimensions of a classroom which can be applied without preset evaluation. If we can collect information about various states of affairs in the classroom, the way is left open for subsequent value applications without making intrinsic apriori judgements.

This research turned upon several core goals. First, the classroom aspects studied should be seen as useful by teachers. Second, areas covered should be relevant to day by day educational ventures rather than the many extra classroom worlds of the pupil. Third, dimensions should go beyond ability and achievement. Fourth, assessment should be brief and to the point, requiring the minimum classroom time for collection if they are to find much use in the regular classroom. Fifth, instruments should eventually be developed to the point where a trained teacher could administer them as they can now do in the case of achievement tests. Sixth, the final instruments should be usable with a broad age range of pupils in order to permit developmental studies.

The final result anticipated is a several dimension profile of a classroom, with appropriate attention to the range and pattern of responses around the mean for the class. This will provide the teacher with diagnostic information for designing his teaching input. It should be said that, having a profile of the class perceptions and needs does mean the teacher must rest the case with present status. For example, a teacher may have a group quite resistant to educational tasks, and thereby decide to start with reduced requirements, or heightened motivational efforts. But the long term over-all design could also embody such practices as would lead to increased task acceptance on the part of pupils. Another class may show the need for intensive control and management monitoring, but again, a teacher may try to alter this status so that the pupils become more self directive over time.

It will be remembered that it was stated certain classes have individual reputations. They are thought to behave according to pattern regardless of the teacher but obviously teachers respond to a class as the class reputation suggests so these intertwined perceptions contaminate possibilities of flexibility. To study progressive effects, in this research the aim is to follow the same classes over a three year period. This would give teacher variability a chance to operate. The data collection scheme is as follows:

1962 III(24) IV(24) V(25) VII(52) VIII(48) IX(55)

1963 IV(21) V(24) VI(26) VIII(51) IX(57) X(53)

1964 III(21)*V(21) VI(24)VII(48) IX(57) X(58) XI(61)

*Tested December 1963 and May 1964-Special Study

The major comparisons provide 6 sets of 3 year sequence, for comparison at the various levels. The teachers were not always the same person for each grade which presented another fascinating research possibility. These matters will be taken up in detail in the second half of the report.

Developing a nomative base line for the dimensions

Two problems confronted us relative to the major purpose of the study. One was the fact that the University School research sample was recognized as an atypical group of children, as would be expected in any such training school. If clinical judgment can be trusted, the attitudes toward school and each other in this setting were not always typical of those generally found in pupils. Also, we were interested in following these children for three years and in examining various grade levels. To do this required a normative base obtained from the scores of more representative youngsters than ours.

To this end we enlisted the cooperation of a large city school system. They in turn selected classes at the third, fifth, seventh, ninth, and eleventh grades. Further, they obtained children from several classes in each instance selected to be representative of the range from central city to surburbia. These 430 children are from a typical Michigan city and the school from which the classes were drawn represent all strata.

As might be anticipated, the apriori dimensions which were embodied in the final 186 used of 420 tested items on the perceptions of the classroom proved to be a psychologist's view rather than a pupil view of the school world. It became necessary to subject the whole to a factor analysis before the actual pupil perceived classroom would be evident. Then these dimensions could be standardized by age to enable genetic and across group comparisons.

RESULTS OF THE FACTOR ANALYSES OF THE CLASSROOM QUESTIONNAIRE

The problem inherent in factoring children's responses to a classroom is that one is faced with the variety of Gestalt which are in fact in classrooms as they see it rather than the theory suggested patterns. Pupils respond to the impact of various aspects of a classroom as it strikes them; they put together responses on an internal basis, even when one selects questions which ought to reduce such mixtures.

The final factored dimensions which comprise the learning index are as follows[1]: motivation (6 items); ([1]Here and elsewhere, the items can be found in the appendix.) teacher as facilitation of learning (7 items); conventional learning which is to say memorization and convergent thinking (5 items); and complimentary learning which is motivation and divergency (8 items).

The Social Climate Index was far from the original concepts concerning the social configuration. There were three dimensions:

Rigid-flexible (21 items); generally accepting social climate (5 items); and acceptance given (a saturation sociometric where every pupil responded concerning every other pupil.

The third area which factored out was the Mental Health Index. It was comprised of two-dimensions: school anxiety (6 items) and Emotionally supportive classroom (12 items).

In addition there were two dimensions which dealt with pupil affiliation with accepted (adult type values) norms concerning school situations: Self norms (6 items) and norms imputed to the peer group (6 items).

The problem of grade level differences on the dimensions is critical in connection with eventual norm tables as well as for evidence regarding trends, sex differences and the like. With a total N of 428, and some grade level sizes ranging from 98 to 80, one speaks with caution even though the pupil population was selected with a view toward representing a cross section. There is also the problem still present of the ability of third grade pupils to respond to these items at their level of sophistication. With these limitations in mind, the tables can be examined.

The obvious first point is the fact that, in almost every instance the Grade III has a most positive perception of school, and there follows a pronounced drop by grade V with a gradual build up through Grade XI. However the patterns are by no means identical.

In the motivation dimension, there is a high start with a gradual drop by Grade VII and some recovery by IX and XI. Sex differences are not significant and the difference between Grade III and all the others constitutes the only significant difference. The teacher as a facilitator of learning starts high, drops sharply and fluctuates up and down by the senior high level. Again the low point is junior high. These differences are significant. Conventional learning and complementary learning show a similar pattern with the decline hitting the low at Grade VII, recovery at IX, with a drop for XI again. The summated Learning Index has the same pattern as would follow. It would appear that Grade VII has the least satisfactory perception of the learning climate, and that there is again less satisfaction at the high school junior year.

The Social Climate conditions have no coherent pattern. The flexibility increases with grade level and the differences are significant. Social climate general acceptance starts high and drops for subsequent grades except for VII. When all items are included to make the Index, the sharp drop after grade III is followed by recovery which makes the III and XI very much alike.

The mental health dimensions and index start high, drop with no trend toward recovery, and even show a further drop by Grade XI. Anxiety in particular, shows a gradual drop. It will be remembered that the higher the score, the lower the anxiety. While Grade IX sometimes reverses the trend, there is a general gradual and significant drop in the mental health scores.

It will be recalled the factoring resulted in just two overall norm scores, one for the self and one for the group. These can be thought of generally as high being a positive, adult acceptable view. Here it is interesting that only the XI on self show a significant difference where there is more alienation with an adult value oriented school situation. When the pupil responds for his peers, the skepticism about their norms increases in general with age.

It is obvious that the standard scores for most dimensions will have to be derived from grade level distributions. This was done, and tables were compiled for the individual grades with interpolations for the in between grades. These are available for use.

The next area of interest was the self concept of the classroom members which has fundamental meaning for a teacher. Here we have what is perhaps the most salient clinical type of information for the educator. With knowledge about the "self", the teacher has a better chance to deal effectively with the moment-by-moment symptomatic behavior faced in classrooms. With the self concept are bound up one's hopes, one's fear, and one's defenses.

In an effort to find a practical method for general school use in understanding a pupil's self concept, several methods were tried and two were put to extensive test.

The Osgood Semantic Differential involves responses to a given stimulus through marking twenty-one sets of adjective scales. On each scale the pupil makes a check mark to indicate his position between the two adjectives. There were six stimuli. An example follows:

Myself (stimulus)

Uncertain ______/______/______/______/______/______/______ Certain
Pretend ______/______/______/______/______/______/______ True

(Twenty-one such adjectives sets are given for each stimulus presented, see appendix)

This method is designed to reduce defensive, "make myself look good" responses and at the same time to avoid difficulties of scoring found in more largely projective devices.

The score for the concept (as Myself) is obtained by summing the numerical weights for each check on the questionnaire. In weighting these responses, a check nearer the more positive adjective is given a greater weight and one nearer the less positive is given less weight. Thus, for example, this is how the weighting would work.

Good 7 / 6 / 5 / 4 / 3 / 2 / 1 Bad
Sad 1 / 2 / 3 / 4 / 5 / 6 / 7 Happy

For each check, a weight is assigned according to its position on the continium. The weight of any single check would range from 1 to 7 and the final score for the concept could range from 8 to 56.

The other major method of studying self concept being currently explored is the Self-Esteem Inventory developed by Coopersmith. This contains fifty-eight items and the pupils make a check mark in response to each. Two samples follow.

	Like Me	Unlike Me
There are lots of things about myself I'd change if I could.		✓
I'm proud of my school work.	✓	

This Self-Esteem Inventory has four subscales in addition to a lie scale (8 items). These subscales are; self (26 items), social (8 items), home, (8 items), and school (8 items). After preliminary study and difficulty in use, the lie scale was dropped. Since we were interested in school rather than home phenomena, this subscale was also eliminated.

This instrument is scored on the basis of number of responses indicating high self esteem. The direction is signified by both clinical judgement and face validity.

Thus, a range of 0 to 26 would be possible for the self subscale, a range of 0 to 8 for the social and school subscales.

There are many possibilities of using these two levels self esteem measures. One can think in terms of discrepancy between the conscious and less obvious scores. Groups might be separated out for study where defensiveness appeared to follow one or another pattern. In the present research it has not been possible to explore this in any great detail.

Normative data.

If one examines the Osgood differences from Grade III to XI one is struck by two facts: grade three is most positive in self concept and the drop to all other grades is significant. Girls always report a higher mean score than the boys. There is more of a tendency for a flat plateau than a build up after the low at grade five. Again, mean scores are considerably higher than the scale mean of 32.

Separate standard scores were compiled for all cases where the distributions were significantly different.

As might be anticipated, the factor analysis of the Self Esteem Inventory is not without some difficulty in interpretation. However, considering the complexity of the concept reviewed in Dyer's research, it comes out fairly well if one drops three factors which are really single item or two item dominants. The clearest of the factors is the Social Self Esteem where all but one of these items has the highest loading in a single factor. (Factor I below) No school items appear, but 3 self items load highest here as well. If signs are reversed, this can be interpreted as social self esteem without problems. The decimal points have been eliminated.

FACTOR I LOADINGS

Items From "Social" Self

4	I'm easy to like.		-51
9	I'm a lot of fun to be with.		-60
14	I'm popular with kids my own age		-57
19	I would rather play with children younger.	(Loads 21 on Factor 4)	(14)
24	Kids usually follow my ideas		-41
29	I don't like to be with other people.		27
34	Kids pick on me very often.		32
39	Most people are better liked than I		42

Items From "Self" Esteem

11	Someone always has to tell me what to do.	21
32	I'm not as nice looking as most people.	38
33	If I have something to say, I usually say it.	-26
37	I'm a failure.	28
7	There are lots of things about myself I'd change if I could	26

(Contains 19.5% of the variance)
Items in ( ) are not highest loading

The second major factor is a highest loading combination of 10 items from self and 4 items from school esteem, but there are several other combinations which have strength as well.

FACTORS II, III, IV, V LOADINGS

Items From "School" Self

		II	III	IV	V
5	I find it very hard to talk in front of class.	-30			
10	I'm proud of my school work.	(24)	-48		
15	I'm doing the best work I can		-51		
20	I like to be called on in class.	(21)	-29		
25	I'm not doing as well in school as I'd like.	(-19)	25		
30	I often feel upset in school.	-61			
35	My teacher makes me feel I'm not good enough.	-29			
40	I often get discouraged in school.	-53			

Items From "Self" Esteem

		II	III	IV	V
1	I spend a lot of time daydreaming.	(-20)	32		
2	I'm pretty sure of myself.		-36		(29)
3	I often wish I were someone else.	-48			
6	I wish I were younger.	(-18)		25	
7	There are a lot of things about myself I'd change if I could.	-29			
8	I can make up my mind without too much trouble.				55
11	Someone always has to tell me what to do.	(-15)*			
12	It takes me a long time to get used to something new.	-31			
13	I'm often sorry for the things I do.	-34			
16	I give in very easily.	(-23)			
17	I can usually take care of myself.				(24)
18	I'm pretty happy.	19			
21	I understand myself.	(19)			25
22	It's pretty tough to be me.	-47			

		II	III	IV	V
23	Things are all mixed up in my life.	-30			
26	I can make up my mind and stick to it.	16			49
27	I don't really like being a (girl-boy).		(-21)	33	
28	I have a low opinion of myself.	-37			
31	I often feel ashamed of myself.	-41			+38
32	I'm not as nice looking as most people.	(-18)	Highest loading in↗ Factor I		
33	If I have something to say, I usually say it.	(24)	Highest loading in Factor I		-26
36	I don't care what happens to me.			58	
37	I'm a failure.			56	
38	I get upset easily when I'm scolded.	-44			
41	Things usually don't bother me.	(21)			29
42	I can't be depended upon.			50	

*Highest loading +21 on a dropped factor.
(% of Variance: Factor II; 25.9; III 11.9; IV 14.1; V 10.9)

Factor II contains the mainstream of esteem items, whether about the self or about school and is eventually a total self esteem. Factor III is the next dominate combination, a "doing well in school", and also contains "sureness" and "daydreaming". Factor IV is self depreciation of a pronounced nature. Factor V appears to be a self certainty and ego strength. But, as can be seen, these factors are intermingled. In considering the implications of the factor analysis for dimensions and norms, it is clear that, in this sample at least, there is some question about the nature of the sub scores. Social is fairly clear except for the several additions. The other two, School and General Self Esteem are not single, distinctive dimensions. In fact, there is overlapping and overall diversity. On the other hand, there is no great clarity about these factors either, as sub factors or in the total relationship. For this reason, the results were not used to develop new dimensions with separate norms. The reader should be aware that we used from the original three Coopersmith self esteem measures and not the factored dimensions.

Coopersmith Grade Level Standardization It has been common to use self concept measures without reference to age levels, although one would suspect that both age and sex differences might need standardization. Again, as we go down to the third grade, it may be that there is both the matter of how these children are able to respond to tests of this conceptual type as well as whatever real condition exists.

The grade level changes for the self were interesting. Starting high, there follows a significant drop to grade five with a gradual build up again until eleven is higher than three. Except for grade three, the means for girls are always under the boys though not significantly so. Really, the only grade which deviates from any other is five which came as somewhat a surprise since it had been thought that the junior high age would show maximum upset in this area. In social self, the success one feels one has as a social being, there is a lower starting point for grade three though grade five is the lowest and then follows a gradual increase through grade nine. As can be seen, with only 8 items on the scale, even most of these unimpressive changes are significant. After the third and fifth grade, average girls are more positive about their social selves than are the boys, though this difference is not significant, and cancels out in the overall totals. The school self presents the least clear picture, and is further confused if one examines some of the eight items. The impressive thing is the drop from grade three to five, and the lack of any recovery as is the case in the other two. The course of events is irregular, with five and seven and nine and eleven paired off to a degree. After grade three until eleven, girls appear more school self secure though as usual the degree of difference is minimal. Of course, these part scores are reflected in the total scores where the trend is clearly high for grade three, a severe drop and then gradual recovering in total self esteem by grade eleven, but never back to that reported by three. It is interesting that all the mean scores for both sexes are above the theoretical mean for the scale, though the school mean is the least elevated. While one might conjecture from this that school self concept is the least positive of the three, there is no way of being certain that the items are of equal potential across scales. At any rate, it was clear that the norms in this scale had to be devised to accomodate the differences found and standard scores were devised for each distribution as necessary. The impact is not clear until one looks at the individual items and the manner in which the pupils respond to them.

Pupil Needs No problem in psychology is more complex than ascertaining needs. At the same time, this is a matter of considerable importance to education. Traditionally, lists of needs have been presented to teachers as the well springs of activity.

The aim in developing an instrument in this area was two fold. First, the need constructs should be cast in terms of particular pertinence to the elementary and secondary classroom situation. Second, the method of assessment would have to be administered in a group situation. Considerable experimentation was done before the present design was selected. Eventually four need configurations thought to be of most use to the teacher were selected: affiliation, achievement, influence and a creativity-independence complex. All have obvious impact in the classroom activities.

The method of assessment would have to allow for dominance of an individual need with some range of intensity but not prevent a flat, equalized profile of the several needs if the subject so wished to reflect.

We made no assumptions that the presence of one need would mean the absence of another. However, it is obvious that you cannot give the directions as finally devised and still allow for high individual intensity on all needs. An individual can play one up high, share the intensity of others to a lesser extent or have all equal but with lower intensities. This is mentioned because, theoretically the position here is that one person might have a higher intensity of need in all three areas than another had in even his high area. The test procedure did not permit such recording, however. When the scale was administered by having the pupil put as many cards as he wished in the high intensity pile, many pupils tended to produce non discriminating scores, everything being high. While this might be truly the picture for some, a flood of such responses did not fit our theoretical stance, and this scoring process was not repeated. In another similar scheme previously used with adults, the correlation was high between the forced and free sorting scores but the allowing the respondent to put "all you want" in any pile drastically reduced the differences between scores as well as the range of scores obtained. Hence this was not repeated.

Now the way one scores the scale, of course, represents a theoretical position regarding the interrelationship of need structures in children. One position would be a typology where one single need dominance would characterize the individual. The opposite position would imply that each pupil could have various degrees of presence or absence of all needs. In this way of looking at it, a child could score high on all, low on all or any combination derived from having him rate each item of the scale independently.

The design finally utilized represents some of both positions. With a modified Q-sort, the scores are interdependent. A pupil might have a high score, and two low scores, or balanced "even" scores on each need, but he could not have all low scores or all high scores. This tends, of course, to accentuate differences, and gives the opportunity for patterns of relative high intensity in two needs at the same time.

In the preliminary form 40 items were printed each on individual cards, 10 each for the 4 dimensions indicated above: affiliation, achievement, influence and creativity-independence. The items were judged to have face validity by several psychologists and the wording was tried out and refined on a pilot run of pupils. These were given to approximately the same number of pupils in grades 3, 5, 7, 9. The directions for administration and scoring were, with very little alteration, the same as for the final form. These 40 items were intercorrelated and factored. Two changes resulted. First, the creative-independence dimension did not appear except in three items which were removed from the test and placed elsewhere in the classroom questionnaire. Second, items with a low or double factor loading were removed. We were left with 24 items which appeared satisfactory, 8 each for the three scales, affiliation, influence and achievement.

This factored and reduced 3 dimension needs, test was then given to a new sample of 153 pupils with subgroups from grades 3 through 11.

MY OPINIONS

There are some activities you like more than others in your life at school. Each of the cards in this envelope mentions an activity which may give you a lot of satisfaction or be something you don't care much about doing. There is a special way to sort the cards so that it will be easier to decide.

1. Remove everything from the large envelope. Write your name on the yellow card and place this card back inside the large envelope.

2. Look through all of the white cards and choose the 8 that give you the most satisfaction to do. Put these cards on top of the envelope labeled "satisfying."

3. Now take the cards you have left and choose 8 of the cards with activities which would give you the least satisfaction to do. Place these cards on top of the envelope labeled "unsatisfying."

4. There will be 8 cards left which you have not placed in either pile. Put these 8 cards into the large envelope.

5. Of the 8 "satisfying" cards choose 3 which give you the highest satisfaction of all. Place these 3 inside the envelope labeled "most satisfying". Place the remaining 5 cards inside the envelope labeled "satisfying."

6. Now take the 8 cards on the "unsatisfying" envelope. From these 8 cards choose 3 that give you the least satisfaction of all. Put these 3 inside the envelope labeled "least satisfaction." Place the remaining 5 cards inside the envelope labeled "unsatisfying".

7. Place all the envelopes back inside the large envelope. You are finished!

LIST OF INDIVIDUAL ITEMS

1. Working hard at any job I undertake.
2. Being appointed or elected chairman when on a committee.
3. Arguing for my point of view when attacked by others.
4. Being able to control the actions of others.
5. Knowing that I am the kind of person other people will like.
6. Trying again after I have failed.
7. Convince people about something they don't agree with.
8. Being good at solving hard problems in school.
9. Being able to persuade and influence others to do what I want.
10. Sharing most of my thoughts with my friends.
11. Solving unusual problems.
12. Being with people I know and like.
13. Being able to show that I have done a difficult job.
14. Having the chance to supervise and direct the actions of others.
15. Being with a whole bunch of kids--where everyone is friendly.
16. Doing my best in everything I undertake.
17. Knowing how other people feel when they have troubles or problems.
18. Making decisions about what we are going to do when I'm in a group.

19. Being thought of as a leader.

20. Getting difficult goals for myself and trying hard to reach them.

21. Knowing that I can make friends.

22. Always sharing things with my friends.

23. Knowing that my friends feel the same way I do about things.

24. Keeping at my school work until I get it done.

This scale is scored as follows. When an item is rated most satisfying, 5; more satisfying, 4; remainder, 3; less satisfying, 2; least satisfying, 1. There are eight items on each of the three dimensions, and the scores would be the total points for each of the items in the set.

From the averages it would appear that, the strongest need in these pupils is affiliation, next strongest to achieve and lowest to influence or dominate others. There is considerable evidence that this hierarchy may in fact represent the actual level of the three needs. Many psychologists have pointed out that the culture has been more effective in emphasizing socialization than in encouraging school drive or the desire to influence others. Perhaps we have made them affiliative, crowd responders more than anything else. At the present time, with the stress on achievement, it is surprising that this need did not appear at the top of the list. However, if needs are as basic as psychologists indicate, they are cultivated through deep cultural mores and do not respond to the contemporary gyrations. If this be true, strong external pressure to achieve becomes a source of tension rather than producing changes in needs which educators imply.

Development of Standard Scores for Needs The boy and girl differences are less than anticipated but in the direction one would expect. Girls (except for grade 3) are more affiliation minded to a significant degree in grade 7, 9, and overall. Boys (again except for grade 3) are more achievement minded than are girls and to a significant degree in grade 9, 11, and overall. The difference in influence, while favoring the boys, is not significant. The age level differences in affiliation show a gradual build up for girls until after grade 9 when it drops off; for boys the reverse is true but the differences, with these N's, are not significant. In achievement the boys show unusual stability after the third grade and the girls as well show little change. All age level total differences here are between other grades and grade three. The only significant differences in influence are with grade three totals although the girls do show a small but consistent drop until after grade 9. The norm tables developed provide separate distributions to accommodate the instances where significant differences were found.

Mary Anne Hayes[1]

APPLICATION OF THE SCHOOL CLASSROOM RESEARCH QUESTIONNAIRE TO A SPECIFIC CLASSROOM

A major goal of the School Classroom Research Questionnaire (SCR) is to provide the classroom teacher with immediately useful group and individual information.

After the individual questionnaires have been scored, the group mean on the Learning, Social and Mental Health Indices and on their sub-dimensions may be compared to the normative group, to another group, or to the same group at another time. The pattern of scores and their deviations help to focus attention on areas worthy of more intensive study. The group response to individual items on a dimension of concern can be informative. The pattern of scores of an individual may be related to the classroom means or to those of the normative group. Comparison of individuals within the class by ranking on dimensions is useful. Also of interest are differential perceptions of boys and girls within the class. One seeks to ascertain where the group differs from the desired goal, which are the contributing members and their degree of influence. The latter inference is aided by drawing a sociogram. In planning focused intervention, notation of how an individual's perceptions deviate precedes the pursuit of "Why do they?", "What do we wish to do about it?", and "What can we do about it?"

The proof of the research is in the utilization and a unique opportunity presenting itself for close study.

---

[1] Mary Anne Hayes is a student in the Ph.D. Program in Education and Psychology, University of Michigan and served on the staff as research assistant.

One particular class had a reputation for being "difficult." Both the teacher and the parents had expressed concern and hope that an atmosphere more oriented toward learning could be created. The teacher requested an analysis using the instruments.

The design was a pre-post administration of the SCR with the group serving as its own control. The scoring procedure automatically permitted comparison of the group with a normative population at the same grade level. Supplementary information was available in the form of SCR scores for two prior years and self concept and need structure information for each of the three years. The temporal sequence of the experimental design was:

Grade Level of Pupils

3	4	5 (Fall)		5 (Spring)
SCR SELF NEEDS	SCR SELF NEEDS	SCR	INTERVENTION	SCR

The subjects were 10 girls and 12 boys in the fifth grade. Their chronological age ranged from 116 months to 136 months. Intelligence (Stanford Binet or WISC) ranged from 100-160. The cultural background was primarily middle class. The group history showed that the class had been split between two combined third-fourth grade classes during their third grade year and had been combined into one class in the fourth grade. The fourth grade year had a change of teachers during the year. The group had been tagged "difficult" by teachers and administrative staff.

There is no way to do justice to the complicated sequence of this classroom put together out of two others and later reconstituted, with various natural and planned interventions. The reader must study the complete chapter, but it is clear that these data do offer interesting opportunities for a new way to objectify and classify classrooms and individuals' behavior within classrooms.

In very brief, the changes found in the experimental year were in the direction and of the nature to be expected. One could be quite satisfied with the results of the planned intervention efforts except for one thing: The changes which took place over the non-experimental periods.

This invites more detailed examination since it suggests that interventions unplanned may be more significant than those planned. Were there factors in the natural setting which have any logical relationship to these results?

There was an administrative decision to establish two combined third-fourth grades which may have had an unforeseen impact on attitudes toward academic learning, social behavior and self-esteem. Group III-IV A, the less mature, was composed of 13 third graders (10 boys, 3 girls) and 11 fourth graders (4 boys, 7 girls). It contained all of the boys later cited as being difficult. Group III-IV B, the more mature, contained 11 third graders (5 boys, 6 girls) and 11 fourth graders (7 boys, 4 girls). The latter group contained most of the boys and girls later cited as being more mature and academically oriented. In both groups the chronological age range would be broader than in most classrooms with a flatter distribution expected. One would also expect some cross grade competition group status and academic recognition.

Now it is important to note that the third graders who came to constitute the experimental class were thus in two different combination grades when the data were first collected. In both instances, our third graders would be the low men on the totem pole relatively speaking and deprived of their group structure from the previous two years. There is evidence that the third graders were oriented toward the fourth graders in their respective groups and their own age group suffered lower acceptance. When we look at the scores on the scales for the fractionated third grade they are depressed on all Indexes. At least all scores are below the mean.

This fractionated third grade were put back together in one fourth grade, and they resumed the membership that had been together in grades one and two. One anticipates some readjusting. The social climate was slightly down. The learning index slightly up and the mental health improved the most, but then it had been quite low. Also, during this period there was a teacher turn over which would hardly add to the development; in fact, the reputation of a difficult group became established.

Now we come to their fifth grade experience. The first measures were after the summer and one month under a most concerned teacher. She went all out to help the group in all areas. At this point the measures show pronounced improvement in the learning area which was one visible teacher effort point. The mean of this index is now considerably above the mean. Social climate shows some improvement but it is still below the mean. It proves for many teachers a most difficult complex to alter. Mental Health goes up as the teacher introduces academic stability and purpose. It is now above the mean.

At this point attention became focused on the social climate as the one remaining low area. During the experimental year this was the object of the intense work previously described. As a consequence, in the spring assessment, there is a slight drop in the learning index and no real change in the Mental Health both of which remain above the mean. However, the social climate does show pronounced change and in the direction of the effort.

The classroom environment was seen to be significantly more flexible. Significantly more acceptance was given and received and although non-significant, changes in the accepting social climate were in the expected direction. The resultant was a significant increase in the positive perception on the Social Climate Index. Perceptions in the learning and in the mental health areas did not change significantly.

There are several lessons to be gained from this. One is, the consequence of administrative manipulation of groups to serve one goal may not, at the same time, satisfy others. There is a distinct need for base line material on classes before planned interventions that appreciation of consequences may be as broad in base as possible. Another matter is the fact that mean changes mask individual variance in adaptation as shown by the case studies. At all odds, one should be cautious in ascribing changes to given interventions without first thinking of the long term developmental trends.

The Group in Grade Six: A brief summary of the sixth grade teacher's perception of the group is based on an interview held in the spring just prior to the end of school. Preceding the teacher's contact with the group there were rumors that this was a difficult group with a pin-pointing of the boys and particular children as targets. Rumors that he was a "tough man teacher" also circulated among the group and resulted in a delegation of boys who called on him before classes began. He indicated his firm expectancy that the group would get along all right.

When he met the group in the fall, he found them "sharp and sophisticated." They were unusually sensitive to adult reactions, skillful in challenging authority and in manipulating adults. He assumed a role emphasizing his leadership rather than his power to direct their activities. Firmness in the expectancy that they would behave like adults and treating them in like manner helped him to establish a subtle control without making rules that the group regarded as needed only for children and as a challenge to their own autonomy. Group pressures helped keep behavior in line with expectations and both the teacher and the administrative representative felt there had been fewer "incidents" during the year.

The group members were drawn into planning sessions with teacher imposed limits underlying the choices available. Those who tended to challenge authority were put in positions of responsibility for planning and evaluation along with the teacher. The split between the boys and girls in classroom activities continued with the noninteraction more noticeable than the hostility. The girls continued to be more work-oriented and were highly competitive in a subtle manner. The boys remained difficult to motivate, but would eventually follow the girls' lead. As noted the previous year, the group is composed of children who are socially immature or who are quite sophisticated with few in the middle range making the contrasts between individuals more apparent. In his independent description of individual children, it was apparent that the personality dynamics noted the previous year presisted, but continuing slow progress ensued. The teacher said he had enjoyed the group and the individual children, including those cited as being particularly difficult by other faculty members. He felt one of his major problems was trying to dispel the group image among the faculty that the sixth grade boys were behind most of the school "incidents." He found the girls in the class rose to the boys' defense in several cases of mistaken identity. Perhaps intervention on a school wide basis in addition to working within a group itself is needed to prevent a "difficult" group from becoming stereotyped within a given school setting.

CLASSROOM CHANGES--CONSISTENCIES OVER TIME

It will be remembered that 19 dimensions resulted from the factoring of all items and that data were collected on the same set of classrooms over a three year period.

It remains now to follow the individual classes over time with a view to ascertaining change, stability, variance and the like. The story of one class has already been presented in considerable detail in the previous chapter. Now the goal is to follow each class, compare it year after year with itself and any same level classes available in the total sample. Since all of the scores have been standardized, it is possible to compare one class with another without distortion due to age level differences. But a further complication exists, one well known to those doing sequential research in natural classroom settings. This is the matter of population change. There is no reasonable way to adequately justify data with changing membership. It is impossible to tell the status of new pupils before they were added to the group in the first place, or the effect on the total group when various members are introduced or leave in subsequent years. At any rate, all t and F comparisons of the class groups were run with constant and variable N's throughout to explore the possible consequence of this condition.

The point at issue concerning the cross class comparisons at the same grade level is a simple one. If there were no differences between different classes or no pattern lending some consistency to differences as might be found, one would hesitate to attach much meaning to differences in the same group over the years.

An examination of the various classes each compared with others at the same level showed that on these measures the classes can be found which are different. The grade levels cannot account for the variance since scores were first standardized. One could say that each class demonstrates the same unique style of a multitrait idiosyncratic profile which one finds in individual personalities. Endless variation is possible.

The fact that there are differences is taken to mean just that: there are differences in the nature of classes on these dimensions. That these differences are valid indications of the stated condition does not of course necessarily follow. But the fact that there are differences at all is what makes it worth while to work on the validity of such differences from group to group. The fundamental interest of this study, however, is to follow the same class year after year. What is the picture when we follow these classes over a period of time. Will there be variation on these measures of classroom relevant dimensions? (In standardized scores, M = 100, SD = 20. Norm tables are available for all grades, all dimensions).

Grade III did not maintain a stable classroom over the three years. The variable N sample was double the constant N, an unusual situation due as a consequence of an effort to re-group two grades which took place during a part of this study. This was described in detail in the last chapter.

It is interesting to note that this class was quite low in overall average classroom measures, being in the 20's on motivation and mental health. The only high index was flexibility. Of the self concept measures, the semantic was low (72) as was the social self esteem (82). From this state, the group moved in three years to a point where all three major indexes were 108 or better.

The need achievement of the constant N group dropped from 115 to 98 paralleling, as it happens, what was taking place with the shifting total classroom population. Compared with the norms then, this class started out in an unfavorable position. It did change in many dimensions in a positive direction. A teacher working with this group initially should have found them reluctant learners and relatively unmotivated. Other conditions in the classroom climate were also not favorable, and the self esteem was mixed. After three years, they no longer persisted in these characteristics and for all intents and purposes, responded more favorably than average children on all save one basic need structure. The question is, are such conditions and changes typical of these classes? We know there were many mitigating circumstances in this instance as we saw in the previous chapter.

Grade IV On the classroom measures, with the exception of the mental health index, Grade IV began as a typical group for the age. Most dimensions were within five points of average. However, in the self areas the scores were almost all 110 to 126. They had good opinions of themselves and more surface self esteem than most youngsters. This class improved on all but two classroom dimensions. The increases in anxiety and rigidity were not significant. Interestingly enough, all of their self esteem measures, three years later, are just about average. It would be worth knowing whether or not something of a defensive nature lies behind these changes, since one never knows what stated self concept means without a verifying analysis, and the semantic differential was only 94 to start with. The teacher should have found this group a typical one with perhaps two differences at the close. The teacher's role is seen as a facilitator at the very high level of 133: in other matters the class shows positive characteristics except for the anxiety level. There may be a reflection of considerable teacher dependence in this pattern.

Grade V: Grade V began somewhat low on motivation, the social acceptance given and the emotionally supportive nature of the classroom. Several self concept measures were also lower than average. In general, the teacher's place as a stimulant for learning increased and with it the motivation. The result is a class characterized by high involvement in learning. The social climate maintains in the low 90's. With the increased learning emphasis, school anxiety goes up markedly, though for exactly what reason is of course not known. If the semantic catches a deeper level of a self concept, it would appear that there is considerable underlying inadequacy, a bit of which is reflected in the Coopersmith personal and school dimensions as well. The need structure scores tend to remain stable.

Grade VII: Grade VII began as eager seventh graders with a very high involvement in learning. By the time they have become ninth graders, this enthusiasm has modulated and they are below the norms for their age. The social atmosphere has ended slightly under normal, though with no significant change. Again, a pattern noticed before, high anxiety and high learning involvement characterized the group in the first year of junior high. The classroom was seen as more hygenic, supporting and less productive of anxiety. At the same time the learning investment decreased. As a group, they are more positive concerning their personal and social self esteem than school self esteem which ends up low. Incidentally, as will be reported later, this group's measures including academic progress took a considerable spurt the last of the three years.

The assumption here would be that this group moved away from the academic sphere and made some improvement in mental health aspects. However, the school self regard issue was not solved, and actually deteriorated along with this change. It would be difficult to find a group more typical and stable in need structures than this class over the three years.

Grade VIII: Grade VIII started as a somewhat above average group in learning and social climate but low in mental health and norms. Except for school self esteem, this was apparently not accompanied by low self esteem. In fact, the self concept aspects tend to maintain at reasonable levels except for school. Now the second year is interesting. Here the learning, flexibility and social climate suffer. At the same time peer acceptance increases slightly, there is less anxiety, and more emotional support in the classroom. Their own values as seen in the norms tend to compensate and self esteem builds up. One could speculate that the peer culture is a major source of their gratification rather than academic success. It is as if they banded together to ward off outside infringement. Also, achievement as seen in their educational age increases less than six months during this year: it will about double in increase the year following. Obviously the academic aspects are out of kilter in some fashion or another and it looks as if the second year was a most unsatisfactory one. The one impressive change is the role of the teacher in the third year. There has been no about face regarding learning but the class has come to view the teacher as a very positive influence. One wishes information regarding what actually transpired with these changes: perhaps in Grade IX there is a response to particularly effective teachers.

Grade IX: Grade IX began somewhat low in overall learning and with a rigid atmosphere. The overall social climate began low and remained set, and emotional support was at 84, with a total mental health index of 81 again. With the exception of school self esteem, this self area was quite adequate and the need structures maintained almost exactly on the mean.

Again, the striking change is in the role seen for teachers when these students were in Grade X. This is the same point at which the previous set demonstrated a pronounced positive relationship with what are for this group the same set of teachers. The following year this again dips to average, so there would appear to be some factor in that teacher group which encourages the high responses seen in both classes. It will be noticed that the overall learning index does not change appreciably, since the increase in the teacher factor is overweighted by the lack of change in other dimensions. The social climate index doesn't change though there is a drop in acceptance given. Anxiety decreases and the class becomes more emotionally supporting, with increases in mental health. Self norms become more conventional.

The stress of self esteem shows up somewhat in the semantic differential, but is most severe in school self esteem which drops from a starting low point of 72 to 56 and 58. Since this has also happened in several other classes and since it happens in spite of age corrections on the raw scores, it would appear that the competitive academic nature recognized as the nature of this school makes a definite impact. Somehow school anxiety is managed by the way the teachers handle assignments and the way the pupils are taught to study and recite. They are not upset by the tasks. It would appear deeper than this. It is an overall feeling of not doing as well as they are expected regardless of their relative objective successes.

CONCLUSION

It is felt that these measures are useful for designing and studying the particular profile of a class.

Classes do differ from one another and classes do change, each to its own pattern on the twenty-three dimensions. However, little variation over time is seen on the need structure components. In fact, only one of all the constant N changes is even at the 5% level. This suggests the relative stability for the need measures exactly as was anticipated from the theoretical nature ascribed to basic needs. They should be stable conditions not easily altered over time. Such is the case. On the other hand it will be noted that several classes even in this one relatively homogeneous school did show between class differences in need structures, taken together with the same class stability; this is quite encouraging in regard to these measures.

The overall conclusion is that these factored dimensions can be used to describe the many aspects of classrooms as well as to anticipate the design of possible intervention techniques. "School as a whole" also may have identifying general characteristics. These instruments may be one way to study such overall school climates. Ascertaining external evidence for the many dimensions is certainly now worth the effort it will demand.

The present analysis looked only at most global measures which is not enough to really understand a classroom. There are more data to be considered even at this level, and the analyses now underway will include the relationship of classroom and self data to achievement, organismic age aggression and creativity, still however broad band analysis.

Fortunately, we are finally past the assumption that a classroom any more than a person can be understood in simple undimensional terms. The organic nature of the class as a whole suggests many facets to the relationship of needs, classroom experience in learning, peers and authority. All are intertwined in evolution of the self concept. The goal of this research is not to find some simple measure but to measure important aspects of classroom behavior in order to analyze their workings with more astuteness. To measure ability and achievement is not enough.

There are two steps which suggest themselves at once. The first is the study of variance patterns as well as averages. This may show something very critical about between group differences. A hetrogeneous spread on motivation would differ from a tight homogeneous one with the same mean when it came to needed teacher planning. Following this analysis of variation there is the matter of search patterns and sub-groupings. Does the pupil with low self regard also become the low motivated one? Are they split, some rejecting and some eager to learn? Overall correlations mask important sub-groups were interrelationships can be seen in their dynamic unity. This requires a new statistical analyses.

In short, the quest must now move from how many ways can we find to sterotype classes and groups to how many ways can we indivituate and comprehend each class as it functions with unique constellations of characteristics. Also, one need not use all these dimensions in studying a class. Various ones, or groups of dimensions can be selected for particular purposes. In fact, a current sequence in this research employs many of these measures to study the impact of racial integration in a public school system. What happens to the classrooms? And what happens to individuals? These are certainly questions deserving attention and the tools worked up in this research can be applied to this task.

INTERRELATIONSHIP OF CHILDREN'S SOCIAL AND PSYCHOLOGICAL DEVELOPMENT AND ACADEMIC ACHIEVEMENT*

The history of educational psychology is replete with efforts first to describe, then to understand and finally to reduce the wide variability in school achievement which is a dominant characteristic of most classroom groups. Psychometrics provide methods for collecting data which are essential to the use of modern statistical methods. The search for causes of academic variability has attracted much attention and usually proceeds in two different and frequently conflicting, directions. One direction is toward the psychological characteristics of students, the other toward the school and classroom environment. During the early part of the present century much effort was invested in gathering evidence to show that most of the variability in academic achievement can be traced to differences in school organization and/or teaching methods. In general the findings continue to be negative but the effort persists. Witness for example the non-graded school, ability grouping, the ita method of teaching reading, a revival of interest in the Montessori method and many others. All represent efforts to reduce or eliminate achievement variability, to help all children to learn earlier and more rapidly what the schools teach. As a consequence every child could be guaranteed the benefits of equal academic achievement along with his right of equal opportunity for an education.

As a result of recent progress in the field of child psychology many researchers are attempting to establish a strong causal relationship between emotional and social variables and academic achievement. Concurrently findings from the fields of social psychology and group dynamics place increasing emphasis, not only on the importance of a relationship between emotional and social development and learning but also on the possibility that much delayed and slow learning is caused by pupils' emotional and social problems. The assumption is strengthened by clinical evidence which shows that many neurotic or psychotic children have severe school adjustment and learning problems. Consequently the possibility arises that any troublesome school behavior could be causedby social and/or emotional problems which are merely less severe than those requiring clinical treatment.

---

*The findings reported here are primarily the work of Professor Warren Ketcham.

Although the data presented in earlier sections of this part are not derived from clinical assessments, the dimensions studied are the same as those used frequently in such assessments. For example, anxiety, the self concept, felt needs and the conscious awareness of the relation of the self to reality are important variables in many clinical examinations. The differences for purposes of this study are largely those of group vs. individual and depth. The broad dimension under investigation is the impact of children's emotional and social development on academic achievement. The hypothesis being tested is that the two have a significant causal relationship in the developing child. Consequently the amount of academic achievement should vary with children's success in achieving a healthy personal social adjustment in the classroom.

During the past 35 years the University School research program has sought to demonstrate that the study of children and adolescents provides both a sound theoretical basis and a useful understanding of the variability in academic achievement encountered in the schools. The theory assumes that a dynamic interrelationship exists between growth, maturation and learning in the developing child. Support for the theory is drawn from (a) data from experimental embryology, (b) the concept of readiness included in most learning theories and (c) the theory of learning ability which places heavy emphasis on the importance of general ability or the "G" factor. The assumption of a significant correlation of size and maturation at birth is basic to the theory and widely accepted. An outstanding example is the use of measures of weight and body length as primary indices of prematurity. Although more subtle maturity indicators are needed as development proceeds, the relationship between body size and maturation continues into the adult period. In turn maturation becomes the most valid and reliable predictor of readiness for learning. During middle childhood a positive and significant relationship between mental maturity and academic achievement emerges and rapidly becomes the dominant school related developmental factor.

Data to support the above theory are derived from measurements of height in inches, weight in pounds, and grip strength in kilograms as indices of growth; carpal X-ray, number of permanent teeth and intelligence as indices of maturation; and reading, language and number skills as indices of learning. As previously mentioned the raw data are converted to age units in months. Growth (height, weight, and grip strength), maturation (carpal, dental, and mental) and learning (reading skill) ages are averaged at a given chronological age to form an index of total development labeled "organismic age." (Olson & Hughes, 1942) The "organismic age" measure is related to our developmental theory by virtue of its including growth (structure), maturation (functional capacity), and learning (skill) variables. It also provides the basis for testing the hypothesis that since children are irrevocably different in their growth and maturation their learning as indicated by academic achievement will exhibit a related level and variability. For a more detailed discussion of the theory advanced above the reader is referred to Gesell (1928) and Olson (1959).

Three assumedly discrete and self-contained theoretical approaches to the problem of group differences in academic achievement are provided above. The assumption that only one of the approaches is valid places the theories and their proponents in conflict. The purpose of the present research is rather to increase their combined utility by placing them in a more reasonable perspective within the school setting. In the following statement Olson seems to have captured the essential nature of the task of reconciliation facing social scientists from different disciplines who wish to serve the educational enterprise:

> "In contemporary concepts of development the contributions of heredity and environment are agreed to be indeterminate, and the important task is to study the process of interaction and, for a given individual, to improve the environment.
>
> Thus, while the maturation process describes the potential capacities of the individual, experience determines the expression of that potential in development. Environment supplies the conditions for growth, and development is the end product of the interaction. Biological determinism has tended

> to place a strait jacket on planning for improvement through other than genetic means. The social approach also has at times excluded the additional processes which are at hand and the refinements which may be introduced by working with difference in a dynamic fashion. Much of the evidence which exists requires order and relationship and justifies an excursion into biosocial theory in a scrutiny of social science as science."[1] (pp. 201-02)[1]

With the above conciliatory statement in mind we are hopefully prepared to examine our data on the interrelationship of children's social and psychological development and academic achievement. Before proceeding let us again be reminded of the widely held assumption of a strong causal relationship which frequently serves as the basis for numerous remedial and corrective procedures designed to raise the level and reduce the variability of academic achievement for classroom groups. In their original formulation of the "organismic age" technique Olson and Hughes (1942) suggested the possibility that the measures used represent an inclusive theory of the growing child. Although they recognized the need for further research involving, among others, variables of emotionality and social adjustment, one easily gets the impression that a strong relationship was anticipated. In part the present project was designed so as to meet that need on a larger scale than has heretofore been attempted.

THE DATA ON ACADEMIC ACHIEVEMENT AND SOCIAL AND PSYCHOLOGICAL VARIABLES

The intercorrelations of academic achievement (Ed.A) and social and psychological variables are presented in Table (31). Only those variables significantly related to Ed.A, 16 from a total of 23, are included. Conventional learning process and rigid vs. flexible classroom are the only variables significantly related for all three years. The correlations for these are reliable and significant at the .01 level but negative. Five of the other variables show significant correlations with Ed.A for 2 years and 4 for one year. The range in correlation values is from -.47 to +.31.

By way of contrast the correlation between Ed.A and organismic age is reliable, significant at the .01 level, positive and, in addition, substantially larger than those obtained for any of the social and psychological variables. The differences in academic achievement accounted for by the two types of variables is indicated by 22% for rigid vs. flexible classroom which has the highest intercorrelation among the classroom variables compared to 59% for organismic age on the basis of its lowest intercorrelation which occurs in 1964. Mental maturity appears to occupy a position between the other two variables as a predictor of academic variability. The absence of a significant correlation between individual IQ and educational age for 1962 and 1963 and the low correlation for 1964 are due to differences in distribution, the IQ being restricted and skewed to the left. The data presented in Table (31) fail to provide evidence in support of either a strong or reliable relationship between the social and psychological variables used in this study and academic achievement. This finding is in substantial agreement with those of Lavin (1965) and Wolf (1965). However the assumption that academic achievement is primarily a function of development as represented by organismic age is supported. These data suggest the possibility that we are dealing here with two global human achievement factors, academic and personal-social, which in general are not highly related among members of classroom groups. Additional support for this proposition is provided by the data in Table (32) which presents interrelationships between organismic age and 13 social and psychological variables from a total of 24. Three variables show a significant positive relationship, each for one year. Both positive and negative relationships for different years are shown for three other variables. Significant negative relationships are demonstrated for 2 variables for one year, 2 for two years, and 3 for three years. By virtue of their exclusion from Table 32 , the remaining variables show no relationship to organismic age.

The data presented in Table (32) are important for another reason. They reduce the probability that the high intercorrelation between OA and Ed.A is attributable to the fact that reading age is contained in both.

Thus it is possible to assume that variability in academic achievement and personal-social achievement each have a distinct matrix of determiners, the former predominately genetically orientated and the latter predominately environmentally orientated. Viewed empirically, the idea appears plausible. A child predisposed to marginal academic

TABLE 31

INTERCORRELATION OF ACADEMIC ACHIEVEMENT (ED.A) AND SOCIAL AND PSYCHOLOGICAL VARIABLES FOR 1962, 1963, AND 1964

Variable		Year	
	1962	1963	1964
A. School Classroom			
Motivation	19		-23
Teacher/Learning Facilitator		23	
Conventional Learning Process	-25	-28	-28
Complementary Learning Process			-21
Learning Index		-16	-35
Rigid vs. Flexible	-47	-46	-47
Acceptance Given	20		
School Anxiety			31
Emotionally Supportive Room		19	
Mental Health Index		19	17
Self Norms		26	22
B. Self Concept			
Social Self Esteem	-22		-29
C. Needs			
Affiliation	-23		
D. Growth Data			
Individual IQ (Binet or WISC)			25
Group IQ (PMA)	45	45	48
Organismic Age	82	84	77
Individual IQ (Binet or WISC) With Ed.Q	53	56	56

Significance at .05 level is not underlined.

Significance at .01 level is underlined.

TABLE 32

INTERCORRELATIONS OF ORGANISMIC AGE AND SOCIAL AND PSYCHOLOGICAL VARIABLES

Variable		Year	
	1962	1963	1964
A. Classroom			
Motivation	18		-33
Teacher/Learning Facilitator		20	-19
Conventional Learning Process	-23	-33	-37
Complementary Learning Process			-25
Learning Index		-21	-46
Rigid vs. Flexible	-55	-54	-58
Acceptance Given	26		
Social Climate Index			-21
School Anxiety			21
Self Norms	-26	23	-26
B. Self Concept			
Personal Self Esteem	28		
Social Self Esteem	-33	-20	-38
C. Needs			
Influence	21		

Significance at .05 level is not underlined.

Significance at .01 level is underlined.

achievement by virtue of comparatively poor organismic endowments need not at the same time be predisposed to a distorted and debilitating relationship with himself, his peers, his teacher and his classroom environment. The following four equations based in part on our data are intended to illustrate the hypothetical types of cases to be expected at the extremes in classroom groups:

1. High organismic endowment + constructive home and school management = high overall school achievement.
2. Low organismic endowment + constructive home and school management = low academic achievement + high personal social achievement.
3. High organismic endowment + detrimental home and school management = high academic achievement + low personal social achievement.
4. Low organismic endowment + detrimental home and school management = low overall school achievement.

The equations assume that at present academic achievement and personal social achievement vary independently to some degree. But they do not do so sufficiently for reliable predictions and not enough to protect some children from becoming victims of a level of academic achievement which is for them optimum but is at the same time less than the best or less than that of which they are erroneously judged capable. Theoretically, any present discernable negative relationship between academic and personal social achievement may be attributable to Cannon's Wisdom of the Body which according to Olson (1957) "enables children to make wise choices in matters educational.". p. 272 It might be added here to also persist in those choices, in the face of environmental pressures with whatever means are available. Additional theoretical support is likewise provided by Harlow (1953) whose learning theory assumes a primary tendency to establish transactional relationships with a stimulating environment (the classroom) in the absence of second-order drives or motives which are thought by some to be dependent on high personal-social achievement, i.e. adjustment.

Referring again to the four equations we would expect only a small number of children to fit numbers 1 and 2 even under the most advantageous environmental conditions. The maximum possible number might be set at 16% in each group because of the normal distribution of the organismic variables. A hopeful purpose of wise educational planning might be that of reducing the number of children who at present fit equations 3 and 4. Hopefully this might raise the level and reduce the variability of personal-social achievement for many classroom and school groups. To implement this purpose would, however, require attention to three major obstacles: (1) a cultural resistance to understanding and planning for the wide variability in academic achievement which is normal for most classroom groups, (2) the preoccupation of school administrators, teachers and psychologists with psychologically based remedial and corrective procedures in preference to at least equal concern for developing sound classroom, school and system-wide programs of applied educational psychology, and (3) a prevailing reluctance to recognize that the capacity of school programs to promote optimum personal social achievement in the face of severe home and community deprivations is still questionable.

PART III

The mass of data accessible for statistical analysis when the three independent but interrelated researches were combined necessitated an unusual amount of decision making regarding which of the findings should be related in this report. Detailed analysis of these data is continuing and will be reported at a later date.

Several analytic steps were taken to combine these differing sources of data. First, the inevitable attrition and usual mismatch of data collected, on what was originally intended to be a common body of research subjects, had to be dealt with to form an available pool of subjects on which mutual data existed. Research subjects in the University of Michigan Laboratory School on which all three experimenters had gathered data included children ranging from grades three through eight. As a first step, the subject pool was divided into two parts, by grade, giving us children in grades 3-6 in one group and seventh and eighth graders in another. On each of 79 selected variables, T tests were run between the two groups to determine on which variables a significant difference existed. Of these 79 variables, forty-eight displayed no significant difference between these age and grade divisions. The remaining 31 variables did differ significantly between the two groups.

Those 48 variables for which no significant differences existed then had intercorrelations run between them for the total group of children in grades 3 through 8. Since significant differences were discovered (on 31 variables) between the two grade groupings, separate intercorrelations were run along these dimensions among the children in grades 3 through 6 and among the children in grades 7 and 8.

The relevant findings issuing from the variable intercorrelations discovered in the combined group of children in grades 3 - 8 and the variable intercorrelations, separately, of grades 3 - 6 and 7 - 8 are related in this Part of the research report.

THE PARENTS

For the combined sample of children in grades three through eight, scores were available on 166 husband and wife pairs on the Buss-Durkee Hostility-Guilt Inventory. Not all the dimensions contained in the Buss-Durkee Inventory could be intercorrelated for the combined sample since significant differences were discovered, along some dimensions, for the sample of grades from three through six and the sample of children in grades seven and eight. Intercorrelations among the scores of fathers and mothers are reported in Table 33.

TABLE 33

Intercorrelations of Parent Scores on the
Buss-Durkee Hostility-Guilt Inventory
(Combined Sample Grades 3-8)

	Father			Mother		
	V	G	V & A	V	R & S	Combo
Buss-Durkee						
Father						
Verbal Aggression						
Guilt						
Verbal & Assault	.81					
Mother						
Verbal Aggression	.32		.28			
Resentment & Suspicion	.26		.24	.22		
Combined Score (Indirect Hostility, Irritability, Negativism, Resentment, Suspicion)	.28		.24	.34	.74	

Since several of the dimensions reported are factor-combinations of individual facets of the test, the intercorrelations between dimensions are not unexpected i.e. Verbal and assualt for Fathers and the combined Score (Indirect Hostility, Irritability, Negativism, Resentment, and Suspicion) for Mothers.

Of greatest interest to us is the correlation between the Father's self-report of his Verbal Aggressiveness and the Mother's similar report of Verbal Aggression. Fathers who report a high level of Verbal Aggression are married to wives who are similarly endowed. This correlation suggests that a matching avoidance of Verbal Aggressiveness is to be found in other husband-wife pairs. In the same way, Fathers who rate themselves as aggressive verbally have wives who score high in their inventory response indicating resentment and suspicion. It can be noted in Table Y that Resentment and Suspiciousness in the mother is also correlated with Verbal Aggression scores for the mothers. Even on as limited a sample of dimensions as is contained in this combined sample, it is evident that there is some complementarity in husbands and wives.

In the combined sample, no significant relationship was discovered between the mother's scores on the Buss-Durkee Hostility-Guilt Inventory and the perception of aggressiveness of the children by peers or teachers. For the fathers, however, Buss-Durkee scores are related to teacher and peer perceptions of the child. Teacher and peer ratings of aggression show positive correlations with the fathers scores on Guilt and combined scores of Verbal Aggression and Assault. Teacher ratings are also correlated with the father's score on Verbal Aggression (Table 34).

TABLE 34

Intercorrelations of Buss-Durkee Hostility-Guilt Inventory Scores for Fathers and Peer and Teacher Ratings of the Child's General Aggressive Behavior

	Peer Aggression	Teacher Rating of Aggression
Fathers		
Buss-Durkee Hostility-Guilt Scores		
Verbal		.25
Guilt	.26	.30
Verbal & Assault	.24	.39

These findings are not so massive and convincing that too great a credence should be invested in them. The correlations are positive, but low, and account for only a limited portion of the total variance involved. What is worth observing is that these correlations suggest a direct and straight-line relationship between the self-reported aggressiveness of the father and the perceived aggressiveness of the child as viewed by peer and teacher. The finding is only suggestive and must be elaborated by a much more detailed statistical analysis before its meaning can be fully discerned. This initial, crude analysis does, however define the direction that future exploration might take.

THE PERCEPTION OF AGGRESSION

The original study of the perception of aggression (contained in Part I) chose a single year for its explorations. The single, most revealing finding had reference to the uniform and stereotyped manner in which others (teachers and peers) viewed aggressiveness on the part of the child. The child's own view of his aggressiveness in attitude and behavior failed to match the perception that others had of him.

In the analysis of the combined sample of boys and girls in grades three through eight, it is apparent that this phenomenon is not limited to a single age or grade. The findings (in the combined group) relevant to teacher ratings of General Aggressiveness, Anxiety Regarding Aggression as well as the detailed analysis of the Teacher Ratings of Response to Socialization Efforts on the part of the teacher are, in most respects, identical to those reported earlier on the smaller sample. (Table 35)

Again, the degree to which teacher stereotypes of aggressiveness in children sets the stage for her judgment of the response to her efforts to alter undesirable behavior is painfully evident. The child seen by the teacher as aggressive is also the child viewed as responding badly to the teacher's actions in rewarding or disciplining, criticising the child's work, urging them on to finish uncompleted tasks, or interfering with the child's ongoing behavior. The uniform pattern of these intercorrelations and the degree of communality between the various elements reflected by them suggests that once a child displays aggressive, resistive, or recalcitrant behavior he or she gets cast in a role from which there seems to be no escape and in which there is little if any opportunity to vary the lines. It is probably equally true that each child stereotypes his view of teacher behavior and that the teacher suffers accordingly since stereotyped views do not admit the validity of evidence contrary to it. The problem is that the teacher is in a position of power in the classroom that can never be matched by the child. The long run as well as short run effect of the teachers stereotyped view of the child is certainly limiting on the child in an extreme way. Whole classes gain reputations as being hard to deal

TABLE 35

INTERCORRELATION OF TEACHER RATINGS OF AGGRESSION AND OF THE CHILD'S RESPONSE TO SOCIALIZATION EFFORTS

(Combined Grades 3 through 8)

	General Aggressiveness	Anxiety Regarding Aggression	Reward	Discipline	Criticism	Urging	Interference
General Aggressiveness							
Anxiety Regarding Aggression	.38						
Response to Socialization							
Reward		.28					
Discipline	.47	.37	.36				
Criticism	.48	.35	.36	.72			
Urging	.44	.23	.45	.59	.63		
Interference	.50	.32	.38	.76	.68	.62	

with and control; how much easier it is for the individual to become notorious in this respect and to have his reputation proceed him throughout his academic career. This finding of a uniform view of teacher perception holds across all the children in the various grades and is true of all the teachers included in this study.

The Peer Ratings of Aggression in this combined sample repeat the conclusions reached on the smaller sample (Part I). The peer group shares the teacher's view of which children are aggressive and which are not (r = .64).

Among the measures collected on this sample by Prof. Warren Ketcham was a Reading Age Quotient. This quotient is constructed by dividing a measure of Reading Age by Chronological Age and multiplying the result by 100. In addition, two measures of creativity were administered to the subjects (Torrance, 1960, 1962, 1963, 1965; Barron, 1957, 1963).

The measures devised by Torrance (1960, 1962, 1963, 1965) included: Ideational Fluency, which involves the individual's capacity to make a great many appropriate responses to a given problem or stimulus situation; Spontaneous Flexibility, involving the ability to make varied and unstereotyped (yet appropriate) responses to stimuli; Originality, i.e. the ability to produce appropriate responses which occur with statistical infrequency in the population of which the individual is a member. In addition, a total score of ideational fluency, spontaneous flexibility, and originality was computed.

The second measure of individual creativity was that devised by Barron (1957; 1963). Measures used here included ideational fluency and originality plus a total score based on the two sub measures. Finally, total scores combining Torrance and Barron's measures of ideational fluency and Torrance and Barron's measures of originality were constructed. A grand total creativity was assembled, from the Torrance and Barron measures, which included ideational fluency, spontaneous flexibility, and originality scores on the Torrance Test and ideational fluency and originality scores on the Barron.

In the analysis of the combined population of third through eighth graders, the creativity measures are clearly highly intercorrelated one with another. The Reading Quotient measure is similarly significantly related to all the Torrance and Barron tests of creativity. At least in this population, the two measures of creativity are so identical that the exclusive use of either would have been justified (Table 1).

Interestingly, the relationship of these measures of creativity to Teacher Ratings of Aggression, Peer Ratings of Aggression, Self-Ratings of Aggression, Self-Satisfaction with Aggression, and Parental Hostility and Guilt do not achieve significance. No measure of creativity displayed a direct and significant relationship to the perception of aggression by teachers, peers, or the self. The single, fascinating exception to this uniform lack of relationship is to be found in the Peer Ratings of which children in class are most eager to "Give the Answers" in academic situations. (Table 37).

The correlations reported in Table 37 are all low but positive and suggest that children with a high Reading Quotient and high scores on the Barron or Torrance Tests of creativity may be detected in the classroom by their readiness and willingness to volunteer information and answers. We can reasonably assume that this is one symptom of superior ability or high native potential--the impatience with the slow progress of the classroom on a daily basis. Had the correlations been perfect or near perfect, the findings would have been quite suspect. Many creative children in each of the grades studied could reasonably be expected not to fill this model of the eager, ever-ready student pressing to respond to the intellectual challenge of the classroom. Considering the average condition of the classroom intellectual climate, many of these children could well have dissociated themselves from the classroom goals and sought intellectual solace elsewhere. It is worth noting, however, that a significantly measurable proportion of those creative children who read beyond their age--expectations fulfill this role of the eager student.

It is apparent that whatever is being measured by "creativity" it is a restricted and delimited area of human behavior that bears little relationship to aggression and its perception or the nature of the classroom climate.

TABLE 36

Correlations Between the Torrance and Barron Creativity Measures and Reading Quotient
(Combined Group of Grades Three Through Eight)

	Reading Quotient	Ideational Fluency (Torrance)	Spontaneous Flexibility (Torrance)	Originality (Torrance)	Total (Torrance)	Originality (Barron)	Ideational Fluency and Originality (Barron)	Total Ideational Fluency (Torrance and Barron)	Total Originality (Torrance and Barron)	Grand Total (Torrance and Barron)
Reading Quotient										
Torrance										
Ideational Fluency	.31									
Spontaneous Flexibility	.39	.87								
Originality	.31	.78	.80							
Total	.36	.91	.94	.95						
Barron										
Originality	.51	.40	.47	.38		.44				
Ideational Fluency and Originality	.51	.39	.45	.36		.42	.94			
Total Ideational Fluency										
Torrance and Barron	.46	.84	.84	.74		.86	.63	.64		
Total Originality										
Torrance and Barron	.47	.71	.76	.85		.84	.79	.77	.84	
Grand Total										
Torrance and Barron	.47	.84	.89	.86		.93	.72	.72	.91	.95

TABLE 37

Correlations of Measures of Creativity With Peer Ratings of Wants to Give Answers in the Classroom Situation
(Combined Grades 3 through 8)

	Wants to Give the Answers (Peer Ratings)
Creativity Measures	
Reading Quotient	.32
Originality (Barron)	.29
Total (Barron)	.28
Total Ideational Fluency (Torrance and Barron)	.23
Total Originality (Torrance and Barron)	.28
Grand Total (Torrance and Barron)	.23

Analysis of Grade Groupings

Out of a total of 79 usable variables on which T Tests were run, 31 displayed a significant mean difference between the children in grades three through six and the grades seven and eight. Correlations between these 31 remaining variables were run separately for the grades three through six and for the grades seven and eight. The principal findings to be reported here, then, are grade (and, consequently, age) differences in a selection of the original 79 variables.

Peer and Self Perception

When peer perceptions of behavior are compared with the children's perceptions of themselves, there are some observable differences.

TABLE 38

Intercorrelations of Peer Perceptions and Self-Perceptions (Grade 7-8)

	Peer Perceptions		
	Says Funny Things	Wants to Give Answers	Aggressive
Self-Perceptions			
Says Funny Things	-.32		
Wants to Give Answers		-.30	
Aggressive			-.34

TABLE 39

Intercorrelations of Peer Perceptions and Self-Perceptions (Grade 3-6)

	Peer Perceptions		
	Says Funny Things	Wants to Give Answers	Aggressive
Self-Perceptions			
Says Funny Things			
Wants to Give Answers		-.34	
Aggressive			

All the correlations reported are significant but negative correlations. The negative sign, in this instance, indicates agreement between the perception one has of oneself and the perceptions others have of him. Using just these three variables as a sample, it is evident that seventh and eighth graders have perceptions of themselves that agree with the views peers hold of them with greater frequency than does the typical younger school child. This is a trend educators and parents hope will come with maturity, of course. Both the formal and informal educational process strives to produce children who become insightful adults and see themselves much as others see them. The variables related here are a small sample of the possible variables one could explore to study the growth of congruence between self-view and the view others have of one.

Teacher Perceptions and Parental Hostility and Guilt

The teacher's perception of the general aggressiveness of the child in her classroom is a composite final rating constructed from her ratings of child behavior along a series of dimensions. These dimensions that were combined into a general rating of aggressiveness includes child behavior such as fighting, cursing and swearing, arguing, meanness and orneriness, negativism, dictatorial and monopolistic behavior, etc. The measure of parental hostility and guilt used was the Buss-Durkee Hostility-Guilt Inventory--a self report inventory that assesses variables such as Verbal Aggressiveness, Assault, Resentment, Suspiciousness, Irritability, Indirect Hostility, etc. The Buss-Durkee also provides a number of scores based on the combination of selected related scores.

In Table 40 comparisons are made between teacher ratings of the child's aggressive behavior in the classroom and the father's scores on selected variables from the Buss-Durkee Hostility-Guilt Inventory.

TABLE 40

Intercorrelations of Teacher Ratings of Aggressiveness and Father's Score on the Buss-Durkee Hostility-Guilt Inventory for Grades 3-6 and 7-8.

	General Aggressiveness	
	Grade 3 - 6	Grade 7 - 8
Fathers Buss-Durkee Hostility-Guilt Inventory		
Verbal Aggressiveness	.32	.19
Guilt	.33	.29
Assault, Indirect Hostility, and Irritability	.44	.21
Assault and Verbal Aggressiveness	.51	.14

It is apparent in Table 40 that a significant relationship exists between teacher determinations of the child's classroom behavior and the fathers scores on the Hostility and Guilt Inventory. The significant relationship is most striking for children in the earlier grades and the degree of significance wanes as the children grow older. This finding is congruent with current general theory of child development. This finding suggests that children, as they grow, become increasingly independent of their parents and reflect, less directly, parental characteristics.

Notable in this analysis is the total absence of a significant relationship between teacher raters of aggressiveness in children and the mother's scores on the Hostility-Guilt Inventory. At no age, in this sample of children, was a direct and immediate connection evident in the self-report of the mothers and the classroom behavior of the child. The father's influence is evident where the mothers is not and this relationship is most evident for younger than older children.

Significant relationship does exist between husband and wife and their respective scores on the Hostility-Guilt Inventory. Table 41 presents the intercorrelations.

TABLE 41

Intercorrelations of Husband-Wife Scores on Selected Dimensions of the Buss-Durkee Hostility-Guilt Inventory for Grades 3-6 and 7-8

	Mothers		
Grades 7-8	Verbal Aggression	Guilt	Resentment & Suspicion
Fathers			
Verbal Aggression	.25	.10	.33
Guilt	-.04	.35	.21
Resentment and Suspicion	.10	.28	.31
Grades 3-6			
Verbal Aggression	.41	-.04	.15
Guilt	-.40	.21	-.11
Resentment and Suspicion	.21	-.06	.18

Among the parents of children in the grades 3 - 6, it is obvious that the Verbal Aggression scores of father and mother are significantly related as they are (but to a lesser degree) among parents of seventh and eighth graders. The scores of fathers and mothers on Guilt and Resentment and Suspiciousness do not reach significance for children in grades 3-6 but a more significant similarity can be found for the same variables among seventh and eight graders.

In general, for the older pupils, parents resemble one another in self-reported characteristics more often than do the parents of younger children. Perhaps this reflects a growing similarity among parents the longer they are married and must interact with one another along dimensions of hostility and guilt. Perhaps this sharing of related response patterns provides greater consistency for the child as he grows older.

The Fathers Self-Reported Guilt

The parental self-report of Guilt proves to be one of the most productive variables related to the other variables in this combined study. Table 42 relates the intercorrelation of fathers scores on Guilt and a selected set of other variables.

TABLE 42

Intercorrelations between Fathers Guilt Score on the Buss-Durkee and Selected Variables from the Combined Study for Grades 3-6 and 7-8

	Father's Guilt Score	
	Grade 3 - 6	Grade 7 - 8
Selected Variables		
Anxiety About Aggression	-.09	.27
Response to Teacher Criticism	.11	.30
Response to Teacher Urging	.23	.31
Niceness (Peer Rating)	-.26	-.17
Aggressiveness (Peer Rating)	.41	.15
Classroom Motivation	.03	-.25
Social Climate Index	-.02	-.29
Total Self Esteem	-.08	-.33
Personal Self Esteem	-.06	-.25
Self-Esteem-Social Relationships	-.11	-.26
Self-Esteem-School	-.09	-.35

What is apparent from scrutiny of Table 42 is that the relationship of the Father's Guilt Score to the teacher's ratings of the child's anxiety about being aggressive, and of the child's response to teacher criticism or teacher urging to finish tasks exists only for children in the seventh and eighth grades. The father's self-report of guilt feelings finds its counterpart among older children who are always or almost always anxious about having expressed anger in the classroom and 'short-circuit' its expression and react in a negative or resentful manner when criticized by the teacher or urged and reminded to perform assigned tasks. Fathers who feel a considerable amount of guilt, then, have children who do notrespond well to criticism or reminding by the teacher and who are made anxious by outbursts of anger on their part. For the younger pupils, this does not hold true. Perhaps this reflection of paternal guilt feelings needs the additional control of age before it becomes fully evident.

Exactly the reverse state of affairs exists when Peer Ratings of Niceness and Aggressiveness are compared with the father's.

Significant relationships exist for children in grades 3 - 6 but not for the seventh and eighth graders. Table 42 indicates that the greater the guilt score of the father the less frequently peers rate the child as Nice to Others. By the same token, children of fathers with high hostility are rated as significantly more aggressive than other children. Thus, in their peer relations, the children of fathers who rate themselves as highly guilty are seen as aggressive and not nice children.

Among seventh and eighth graders (but not children in grades 3-6) significant negative relationships exist between the father's estimate of his own experience of guilt and a number of measures of the classroom situation and self-esteem. The children of fathers scoring high on guilt are low on interest and involvement in classroom activities and on an index of social climate in the classroom based on 'progressive' i.e. warm, accepting, and self-directive management of the classroom atmosphere.

Finally, the sense of self-adequacy or self-esteem of the child both with regard to peer relationships and to school itself are also negatively related at a significant level to the degree of guilt the fathers of seventh and eighth graders experience.

When this Table 42 is examined in a broad, general fashion it becomes obvious that growing up with a father whose feelings of being guilty are high produces at least two consequences: 1) a general pattern of behavior and self-evaluation that would not be considered a contributor to good mental health and 2) this state of affairs is most often apparent in older rather than younger children.

The Mother's Self-Reported Guilt

The findings reported for the relationship of the father's sense of guilt and the child's behavior in school have no counterpart with the mother's self-report of guilt and the child's behavior. This despite the fact that the father's sense of guilt bears a significant relationship to the sense of guilt of the mother, at least for seventh and eighth graders.

Significant relationships do appear between the mother's self-report of guilt experiences and characteristics of the child but these are found, primarily, in the measures collected on creativity by Professor Warren Ketcham.

TABLE 43

Intercorrelations of Mother's Guilt Score on the Buss-Durkee Inventory of Hostility-Guilt and Measures of Performance and Creativity for Grades 3-6 and 7-8

	Mother's Guilt Score	
	Grade 3 - 6	Grade 7 - 8
Performance and Creativity Variables		
Individual I.Q.	-.55	-.20
Group I.Q. (PMA)	-.29	-.03
Educational Age	-.36	.01
Educational Quotient	-.37	.02
Reading Age	-.38	-.07
Reading Quotient	-.38	-.07
Ideational Fluency (Barron)	-.34	-.15
Originality (Barron)	-.35	-.06
Total (Barron)	-.36	-.09

The most startling first observation has to do with the total absence of significant relationships between the mother's sense of guilt and measures of performance and creativity among seventh and eighth graders. This observation is matched by the fact that each of the variables considered bears a significant relationship to the mother's sense of guilt for pupils in grades three through six.

Thus, among the younger pupils in our sample, the mother's self-reported guilt is negatively related to individual and group measures of intelligence i.e. either the greater the guilt the less the child's I.Q. or the less the child's I.Q. the greater the mother's guilt--cause and effect is not determinable in this study. Measures of educational age (an average of reading, mathematics, mechanics of English, and spelling ages derived from the California Achievement Tests), educational quotient (educational age derived by chronological age and multiplied by 100), reading age (total reading score from the California Achievement Tests translated and converted to an age equivalent), and Reading Quotient (reading age divided by chronological age, multiplied by 100), display a similar relationship to the mother's self-report of feeling the experience of guilt. The reason for these consistent relationships could be speculated about at length but no single explanation seems adequate to encompass all the present facts.

The fact that significant findings continue to appear between the Barron anagrams test of creativity and the mother's guilt experience is also puzzling. Again, the younger children show such a relationship while the older children seem immune to it. The mother's connection with these measures of performance and creativity are startling and need further research exploration for full exploration. Age clearly is significant in these relationships but the mechanism of its impact is not easily discernable.

The Combined Experience of Guilt in Mothers and Fathers

When the sum of the Guilt scores is assembled for both fathers and mothers, we have a composite index that is worth exploring in our sample of parents, teachers, and children. Measures of ability and performance in the children, when compared with the composite score of guilt in parents, display the kind of relationship we have just discussed for mothers alone.

While the correlations are low, they are significantly patterned in a manner that suggests that parental guilt is reflected in performance for children in grades 3-6 but not for those children who are older. There is no simple, rational reason to believe that parental guilt should directly affect the child's ability to perform well on I.Q., reading, and educational tests. The mechanism to effect this--if indeed it is a reliable finding--is obscure and speculation would be a poor substitute for an experiment designed specifically to answer the particular question of parental guilt and academic performance. The reader can be certain that these test scores are reflected quite accurately in the outcome of academic grading.

TABLE 44

Interrelations of Composite Score of Father's and Mother's Self-Reported Guilt on the Buss-Durkee Hostility-Guilt Inventory with Measures of Performance in Grades 3-6 and 7-8

	Composite Guilt Score	
	Grade 3 - 6	Grade 7 - 8
Individual I.Q	-.39	-.14
Educational Age	-.32	.04
Educational Quotient	-.30	.03
Reading Age	-.32	-.01
Reading Quotient	-.31	-.03

When combined parental guilt is compared with the child's estimates of his or her self esteem, the significant relationships shift to become a property of the older group in our sample.

TABLE 45

Interrelations of Combined Parental Guilt Scores on the Buss-Durkee Hostility-Guilt Inventory and Measures of Self-Esteem Among Children in Grades 3-6 and 7-8

	Combined Parental Guilt Scores	
	Grade 3 - 6	Grade 7 - 8
Total Self-Esteem	-.19	-.28
Personal Self-Esteem	-.12	-.20
Self Esteem-Social Relationships	-.10	-.33
Self Esteem-School	-.18	-.33

Self-esteem and parental guilt works its effect primarily on the older children and acts to relate high parental guilt experience to lowered self-esteem across the board. These findings are suggestive in that they point the way to an understanding of why the child does less well than the average in performance measures (Table 44). With a level of self-esteem that precludes an optimistic view of ones capacity, it is likely that something less than full and complete effort will be forthcoming in the testing situation.

Interrelationship of Classroom, Self Concept, and Need Variables

Interrelationship of classroom, self concept and need variables, allow one to examine the several total indexes of the classroom situation. It will be remembered that all specific items were first studied in relationship to the individual dimensions comprising a given total index and were subjected to factor analysis as well.[1] ([1]See previous report.) Those four dimensions having to do with classroom learning comprise the learning index. Of course none are negatively related to each other or they would not contribute to a summated index. With one exception (conventional learning), at both grade levels, all dimensions are significantly related to the total learning index of which they are a component. For the most part, the dimensions are independent of each other except for the teacher as a learning facilitator and motivation in the classroom. These are closely related, which suggests how strong the teacher's influence is, though this is less strong for older children.

In general, the classroom motivation dimension is related to emotional support and self norms, as is the teacher as a learning facilitator dimension. Complementary learning is related to flexibility, to an overall accepting social climate and to some extent with older children, to self esteem. Those who are higher in classroom motivation are also higher in most of the self esteem measures. It is interesting that the overall learning index is related to most dimensions and indexes as well as self esteem but is not significantly related to the mental health index, personal self esteem or acceptance received. Only with the younger children is the learning index and an emotionally supportive classroom significantly related. This suggests that perceptions of mental health conditions and learning aspects can vary independently in the perception of pupils. Somewhat surprising is the lack of school motivation or any learning component with need to achieve.

The dimensions comprising the social climate index are all themselves interrelated except for the rigid-flexible dimension which, as a matter of fact, is hard to conceptualize. The flexible end indicates choice opportunities and individualization in the pace of expectations: the only significant relationships are with classroom learning aspects. Perhaps this is not surprising since this is where flexibility would be seen. Again it is in complementary rather than conventional types of learning experiences which is as one would expect. The most interrelated dimension of this index group is the generally accepting social climate. The higher the acceptance, the higher the self esteem, and the higher the need for affiliation. Affiliation and acceptance would be expected to interrelate. The positive social climate index is related to most aspects of self esteem, especially with the younger children, and to class norms of a conventional nature. It is interesting that, while acceptance given and received are significantly related, this is only at .26 for the total group. The act of extending relationship to others is not too closely tied with the reception of relationship from others in the classroom group, a matter which diagnoses admonitions to "give" and it will be "returned."

Both mental health dimensions are related to the index as they must be since it is a composite but they are not significantly related to each other. Low school anxiety, which might be expected in relationship to learning, climate and other aspects, is found here to be independent of all except total, social and school self esteem. In these three dimensions, self esteem and absence of anxiety go together. The emotionally supportive classroom has some relationship to motivation, the teacher as facilitator, adult oriented norms and the same three self concept measures mentioned above. The finding of no significant relationship between mental health and the learning index or the social climate index was unexpected. It again casts doubt upon the oft implied symbiosis of mental health conditions and other aspects of the classroom, particularly the learning.

In regard to norms, the older children see themselves and their group as having similar values while the younger children set themselves apart from what they see in the group. Adherence to adult standards in the group norms is related to an accepting social climate in the classroom.

As might be expected, all of the self esteem dimensions are highly intercorrelated, though except for the part relationships to the total, there is still considerable free variance. All of the correlations between the Semantic Differential and the Coopersmith scores are significant. The school has the highest interrelationships with all others. All except the personal self esteem are related to high motivation and the total learning index. In general, the accepting social climate, acceptance recieved, the absence of school anxiety and other mental health aspects are significantly related to positive self esteem. Personal self esteem is, however, more independent.

The negative intercorrelations between need scores are necessitated by the scoring procedure. However, the unexpected absence of the relationship of need measures to all other aspects of the classroom and self concept was totally unexpected. The only significant correlations are with affiliation, the generally accepting climate, and acceptance received. If the measures can be trusted, this could mean that needs function independently of the classroom, following what Bruner has called the cooperative social inductive forces--doing school things in school regardless. At least in the case of affiliation and achievement, if not in influence, classrooms provide reasonable opportunities for some active need expression; perhaps classrooms even tend to modulate the effect of a need-dominance. On the other hand, it may be a consequence of the non-normalized scores used in these calculations. While in general the correlational table here follows that of the study previously noted, there are differences between the relationships of the needs and other conditions. There need-achievement is related to motivation and to overall learning as would be expected. Need-affiliation is related to acceptance received, again in order. Need-influence is related to accepting social climate and an emotionally supportive classroom where influence would be possible, though not to the rigid-flexible dimensions as might have been anticipated. All of this suggests that taking raw scores, even when split for gross age differences, introduces limitations in exploring the possible relationships when one uses a wide age range sample. The raw scores are not the same by sex or age. The fact that the normalized group referred to in the previous study also contained pupils through the twelfth grade may also account for the fact that certain results were not replicated in this more limited age range sample.

In summary, one can say that the perceptual domains of the various aspects studied are not independent, nor was it surmised that they would be. The relative independence of mental health conditions was not anticipated and, since on the previous study with normalized scores, it was not independent, this again suggests caution about the use of raw data over age ranges. On the other hand, conventional learning processes behaved about the same way on both sets of scores. Self concept scores are generally related to classroom process, except for personal self esteem which remains quite independent. Need scores seem here to be separate from the other domains, but this was not true to such an extent in the previous study with normalized scores.

TABLE 46

Intercorrelations of Classroom, Self and Need Variables

a) 3-6 Grades, b) 7-8 Grades, c) Combined 3-6 Grades

	1		2			3	4			5		6	7			8			9		
	(a)	(b)	(a)	(b)	(c)	(a)	(a)	(b)	(c)	(a)	(b)		(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(c)
1. Classroom Motivation	53	39																			
2. Teacher as Learning Facilitator																					
3. Conventional Learning																					
4. Complementary Learning						26															
5. LEARNING INDEX	56	64	66	70		41	71	66													
6. Rigid vs Flx.				28			32	46			42										
7. General Accepting Social Climate		29						33	28	33	30										
8. Acceptance Given							26			30			25	28	26						
9. Acceptance Rec'd.													37	44	41	33		26			
10. SOC. CLIMATE INDEX				28	25				23	30	34		67	60	62	66	76	73	70	76	73
11. School Anxiety																					
12. Emotionally Supporting Classroom	45	44	37	34	35					34											
13. MENTAL HEALTH INDEX	38	41		26																	
14. Self Norm	38	52	31	33	26					40	36										
15. Group Norm				30						29	27		41		31		27	22	27		20
16. Semantic Differential Self Esteem	38		34		24				22	37	27		35	31	32	47		28			
17. Total Self Esteem	38	30								30	27		31		27						
18. Personal Self Esteem								24					42	39	40				30	32	31
19. Social Relationship Self Esteem	55	41						27		35	33		26	26		31			31		
20. School Self Esteem	46	33						27		34	30		39	33					31		
21. Need-Achievement																					
22. Need-Affiliation														28	20						22
23. Need-Influence																					

10			11		12			13		14	15	16			17			18		19		20	21			22		23
(a)	(b)	(c)	(a)	(b)	(a)	(b)	(c)	(a)	(b)	(b)	(a)	(a)	(b)	(c)	(a)	(b)	(c)	(a)	(b)	(a)	(b)		(a)	(b)	(c)	(a)	(b)	
			62	66	78	83																						
						29																						
34	27	31			26		22			36																		
39	27	31						26																				
29		21	39	21	33		26	45	30			42	56	50														
39	27	31									26	34	49	43	47	54	51											
38			33	28	29			41	33			39	40		67	58		40	28									
40			36	29	33			45	32			47	61		94	95		68	70	80	72							
																							-.32	-.37				
																							-.36	-.37	-.38	-.37	-.40	

Relationship of Aggressiveness to Classroom Variables

An interesting question is, how does aggressiveness relate to the classroom climate as seen through the perception of children. Only a few relationships were significant. First off, in Table 47, there is no relationship between the total amount of acceptance given and aggressiveness as rated by teachers or peers. What this means is that pupils can give relationship independent of aggressiveness. But the receiving relationship is negatively correlated with both measures of aggression as is the total social climate index. The more the aggression, the less pupils feel they get acceptance and the lower the total index of the social climate in the classroom. Teacher rated aggressiveness is related to a less accepting climate while peer rated aggressiveness is not. On the other hand, the teacher rated aggressiveness is not related to the pupil perception of emotional support in the classroom while pupil rated aggressiveness is found to be negatively related to emotional support. While teacher-pupil aggressiveness are highly intercorrelated (+.64), there is still considerable free variance left and in some subtle aspects the pupils see different consequences of teacher rated vs. pupil rated aggressiveness in peers.

TABLE 47

Relationship of Aggressiveness and Classroom Variables

	Teacher Rating of Aggressiveness	Peer Rating of Aggressiveness
Accepting Social Climate	-.22	
Acceptance Given		
Acceptance Received	-.22	-.31
Social Climate Index	-.28	-.22
Emotionally Supportive Classroom		-.22

When the groups are split by age, which was necessary on some dimensions, peer nomination aggressiveness is negatively related to social and emotional climate, as would be expected. This is shown in Table 48. In addition, the more aggression, the lower is the motivation for school work. It is not possible to say whether this is a frustration-aggression phenomena or not, but it is clear that a classroom of this type will be less conducive to devotion to the tasks assigned.

TABLE 48

Aggressiveness and Classroom Dimensions

	Peer Nominations as Aggressive	
	Grades 3-6	Grades 7-8
Motivation	-.28	-.18
Accept Social Climate	-.10	-.30
Accept Received	-.36	-.28
Social Climate Index	-.16	-.28
Emotionally Supporting Climate	-.27	-.19

Self Concept (Semantic Differential), Group Norms and Creativity

One interesting observation can be made regarding the self esteem as measured by the semantic differential and creativity as measured by the ten different creativity scores, shown in Table 49.

TABLE 49
Self Concept and Creativity

	Semantic Differential	Group Norms
Ideational Fluency (Torrance)	.31	
Spontaneous Fluency (Torrance)	.31	
Originality (Torrance)	.25	
Total (Torrance)	.31	
Originality (Barron)	.25	
Total (Barron)	.25	
Total Ideational (Torrance & Barron)	.33	-.21
Total Originality (Torrance & Barron)	.29	-.21
Grand Total (Torrance & Barron)	.32	-.22

All the correlations were positive and quite consistent, ranging from 25 to 33. Thus the person with the higher self regard is also the more creative person regardless of what creativity score is used. This may be a condition in this particular school where it appears that high group status and creative performance would go hand in hand. On the other hand, those who are least group conforming are also the most creative as shown by the correlations of -.21 with the total creativity scores. This follows the general observation that creativity and group iconoclasm have something in common.

School Self Esteem (Coopersmith) and Creativity

There are a few significant relationships between school self esteem (Coopersmith) and creativity scores as shown in Table 50.

TABLE 50

School Self Esteem (Coopersmith) and Creativity

	School Self Esteem	
	Grades 3-6	Grades 7-8
Ideational Fluency-Torrance	.15	.26
Spontaneous Flexibility-Torrance	.05	.26
Originality-Torrance	.12	.24
Total-Torrance	.11	.26
Ideational Fluency-Barron	.13	.11
Originality-Barron	.15	.11
Total-Barron	.15	.11
Total Ideational Fluency-Torrance and Barron	.14	.30
Total Originality-Torrance and Barron	.15	.24
Grand Total-Torrance and Barron	.11	.24

Whether this is a condition of general nature or of this particular group of bright children is hard to say, but it is clear that there is a low but consistently positive correlation between school self esteem and creativity. In general the results from the junior high children are higher than for the elementary. It would appear that the one can feel more adequate if one is also more creative.

A very interesting condition is revealed concerning the relationship of norm behavior and creativity when the group is split by age. This is shown in Table 51.

TABLE 51

Norm Behavior and Creativity

	Self Norm		Group Norm	
	Grades 3-6	Grades 7-8	Grades 3-6	Grades 7-8
Ideational Fluency--Torrance	.13	-.40	-.06	-.29
Spontaneous Flexibility-Torrance	.17	-.35	-.09	-.30
Originality-Torrance	.14	-.30	-.16	-.20
Total-Torrance	.17	-.36	-.12	-.27
Ideational Fluency-Barron	.11	-.02	.05	-.25
Originality-Barron	.06	-.11	-.07	-.25
Total-Barron	.08	-.09	-.04	-.25
Total Ideational Fluency-Torrance & Barron	.18	-.31	-.04	-.31
Total Originality-Torrance and Barron	.16	-.26	-.14	-.27
Grand Total-Torrance and Barron	.16	-.32	-.10	-.30

In the matter of self values, the 3-6 graders who have self accepted adult values tend (to a low degree to be sure) to be the more creative. In the junior high level this is reversed, and the correlations are more substantial. Now creativity and anti-adult conformity are related. This may reflect a more structured and conforming expectation in the junior high which means that to be creative one has to be non-conforming. The group norm condition is always negative though more substantial in the junior high group. Thus the creative pupils are those who see their groups as low in identification with adult values.

Bibliography

Aberle, D. F., and Naegele, K. D. Middle-class Fathers' Occupational Role and Attitudes Toward Children. Amer. J. Orthopsychiat., 1952, 22, 366-378.

Anderson, H. H., and Brewer, J. E. Studies of Teachers' Classroom Personalities. I. Dominative and Socially Integrative Behavior of Kindergarten Teachers. Psychological Monographs, No. 6, 1945.

Anderson, H. H., and Brewer, J. E. Studies of Teachers' Classroom Personalitites. II. Effects of Teachers' Dominative and Integrative Contacts on Children's Classroom Behavior. Psychological Monographs, No. 8, 1946.

Anderson, H. H., Brewer, J E., and Reed, M. F. Studies of Teachers' Classroom Personalities. III. Follow-Up Studies of the Effects of Dominative and Integrative Contacts on Children's Behavior. Psychological Monographs, No. 11, 1946.

Barron, F. Diffusion, Integration, and Enduring Attention in the Creative Process. In White, R. W. (Ed.) . The Study of Lives. New York: Atherton, 1963, pp. 234-249.

Barron, F. Originality in Relation to Personality and Intellect. J. Pers., 1957, 25, 730-742.

Bass, B. M. Development of a Structured Disguised Personality Inventory. J. Appl. Psychol., 1956, 40, 393-397.

Bass, B. M. Validity Studies of a Proverbs Personality Test. J. Appl. Psychol., 1957, 41, 158-160.

Blake, R. R., and Ramsey, G. V. Perception: An Approach to Personality. New York: Ronald Press, 1951.

Block, D. A. The Delinquent Integration. Psychiat., 1952, 16, 297-303.

Buss, A. H. The Effect of Item Style on Social Desirability and Frequency of Endorsement. J. Consult. Psychol., 1959, 23, 510-513.

Buss, A. H. The Psychology of Aggression. John Wiley & Sons, Inc. New York, 1961.

Buss, A. H., and Durkee, Ann. An Inventory for Assessing Different Kinds of Hostility. J. Consult. Psychol., 1957, 21, 343-348.

Buss, A. H., Durkee, Ann, and Baer, M. The Measurement of Hostility in Clinical Situations. J. abnorm. soc. Psychol., 1956, 52, 84-86.

Butler, J. M., and Haigh, G. V. Changes in the Relation Between Self-Concepts and Ideal-Concepts Consequent upon Client-Centered Counseling. In C. R. Rogers and R. F. Dymond (Eds.), Psychotherapy and Personality Change. Chicago: Univer. of Chicago Press, 1954, 55-75.

Charen, S. The Awareness of Hostile Feelings in Patients by Their Nurses. *J. Consult. Psychol.*, 1955, *19*, 290.

Chasdi, E. H., and Lawrence, M. S. Some Antecendents and Effects of Frustration in Doll Play. In D. C. McClelland (Ed.), *Studies in Motivation*. New York: Appleton-Century-Crofts, 1955, 517-528.

Child, I. L., Potter, E. H., and Levine, E. M. Children's Textbooks and Personality Development: An Exploration in the Social Psychology of Education. *Psychological Monographs*, No. 3, 1946.

Cook, W. W., and Medley, D. M. Proposed Hostility and Pharisaic-Virtue Scales for the MMPI. *J. Appl. Psychol*., 1954, *38*, 414-418.

Coopersmith, S. A Method for Determining Types of Self Esteem. *J. abnorm. soc. Psychol*., 1959, *59*, 87-94.

Counts, R. M., and Mensh, I. N. Personality Characteristics in Hypnotically-Induced Hostility. *J. Clin. Psych*., VI (1959), 325-330.

Davis, A. Comparison of Three Methods of Personality Assessment: Direct, Indirect and Projective. *J. Pers*., 1955, *23*, 423-440.

Davis, A. Socialization and Adolescent Personality. In T. M. Newcomb and E. L. Hartley (Eds.), *Readings in Social Psychology*. New York: Holt, 1947.

Dinwiddie, F. W. An Application of the Principle of Response Generalization to the Prediction of Aggressive Responses. Unpublished Doctoral Dissertation, Catholic University of America, 1954.

Dollard, J., Doob, B., Miller, N., Mowrer, O., and Sears, R. R. *Frustration and Aggression*. New Haven: Yale Univer. Press, 1939.

Edwards, A. E. *Manual for the Edwards Personal Preference Schedule*. New York: Psychological Corp., 1954.

Edwards, A. L. The Relationship Between the Judged Desirability of a Trait and the Probability that the Trait will be Endorsed. *J. Appl. Psychol*., 1953, *37*, 90-93.

Feshbach, S. The Stimulating Versus Cathartic Effects of a Vicarious Aggressive Activity. *J. abnorm. soc. Psychol*., 1961, *63*, 381-385.

Festinger, L. *A Theory of Congitive Dissonance*. Evanston: Row Peterson, 1957.

Fisher, M. G. The Prediction of Assaultiveness in Hospitalized Mental Patients. Unpublished Doctoral Dissertation, Pennsylvania State University, 1956.

Freud, A. *The Ego and the Mechanisms of Defense*. New York: Internat. Univer. Press, 1946.

Freud, A. Notes on Aggression. *Bull. Menninger Clinic*, 1949, *13*, 9-36.

Freud, S. Instincts and Their Vicissitudes. In E. Jones (Ed.), *Collected Papers,* IV, New York: Basic Books, 1959, 60-83.

Freud, S. *Civilization and Its Discontents*. London: Hogarth Press, 1930.

Gesell, Arnold L. Growth and Personality. *Infancy and Human Growth* (Chap. XVII), New York: MacMillan, 1928.

Gluck, M. R. The Relationship Between Hostility in the TAT and Behavioral Hostility. *J. Proj. Tech*., XIX (1955), 21-26.

Gluck, M. R. Rorschach Content and Hostile Behavior. *J. Consult. Psychol*., XIX (1955), 475-478.

Goodstein, L. Interrelationships Among Several Measures of Anxiety and Hostility. *J. Consult. Psychol*., 1954, *18*, 35-39.

Grace, H. A. Hostility, Communication, and International Tension I. The Hostility Inventory. *J. Soc. Psychol*., 1951, *34*, 31-40.

Hartmann, H., Kris, E , and Loewenstein, R. Notes on the Theory of Aggression. *Psychoanal. Study of the Child*., 1949, 3, 9-36.

Havighurst, R. J., and Taba, H. *Adolescent Character and Personality*. New York: Wiley, 1949.

Helper, M. M. Parental Evaluations of Children and Children's Self Evaluations. *J. abnorm. soc. Psychol*., 1958, *56*, 190-194.

Hendricks, I. War and the Pleasure Principle. *Psychoanal. quart*., 1943, *12*, 311-329.

Hill, T. J. Attitudes Toward Self: An Experimental Study. *J. educat. Sociol*., 1957, *30*, 395-397.

Hokanson, J. E., and Gordon, J. E. The Expression and Inhibition of Hostility in Imaginative and Overt Behavior. *J. abnorm. soc. Psychol*., LVII (1958), 327-333.

Holzberg, J. D., Bursten, B., and Santiccioli, A. The Reporting of Aggression as an Indication of Aggressive Tension. *J. abnorm. soc. Psychol*., L (1955), 12-18.

Ingram, Winifred. Prediction of Aggression from the Rorschach. *J. Consult. Psychol*., XVIII (1954), 23-28.

Jones, A. Distribution of Traits in Current Q-Sort Methodology. *J. abnorm. soc. Psychol*., 1956, *53*, 90-95.

Jourard, S. M., and Remy, R. M Perceived Parental Attitudes, the Self and Security. *J. Consult. Psychol*., 1955, *19*, 364-366.

Kagan, J. The Measurement of Overt Aggression from Fantasy. J. abnorm. soc. Psychol., LII (1956), 390-393.

Lavin, David E. Intellective Factors as Predictors (Chapt. 4). Personality Factors as Predictors (Chap. 5), The Prediction of Academic Performance, New York: Russell Sage Foundation, 1965.

Lecky, P. Self-Consistency, a Theory of Personality. New York: Island Press, 1945.

Lesser, G. S. The Relationship Between Overt and Fantasy Aggression as a Function of Maternal Response to Aggression. J. abnorm. soc. Psychol., LV (1957), 218-21.

Lesser, G. S. Conflict Analysis of Fantasy Aggression. J. Pers., XXVI (1958), 29-41.

Levin, H., and Sears, R. R. Identification with Parents as a Determinant of Doll-Play Aggression. Child Developm., 1956, 27, 135-153.

Lewin, K., Lippitt, R., and White, R. Patterns of Aggressive Behavior in Experimentally Created 'Social Climates'. J. Soc. Psychol., X (1939), 271-99.

Lindzey, G., and Tejessy, Charlotte. Thematic Apperception Test: Indices of Aggression in Relation to Measures of Overt and Covert Behavior. Amer. J. Orthopsych., XXVI (1956), 567-76.

Mason, E. P. Some Factors in Self-Judgments. J. Clin. Psychol., 1954, 10, 336-340.

McCord, W., McCord, J., and Howard, A. Familial Correlates of Aggression in Non-Delinquent Male Children. J. abnorm. soc. Psychol., 1961, 62, 79-93.

McGee, Shanna. Measurement of Hostility: A Pilot Study. J. Clin. Psychol., 1954, 10, 280-282.

McKee, J. P., and Leader, F. B. The Relationship of Socioeconomic Status and Aggression to the Competitive Behavior of Pre-school Children. Child Developm., 1955, 26, 135-142.

McNeil, E. B. Adult Aggression in the Management of Disturbed Children. Child Developm., 1958, 29, 451-461.

McNeil, E. B. Aggression in Fantasy and Behavior. J. Consult. Psychol., 1962, 26, 232-240.

McNeil, E. B. Patterns of Aggression. J. Child Psychol. Psychia., 1962, 3, 65-77.

McNeil, E. B. The Perception of Change in Aggressive Children. Children, 1963, 10, 17-22.

McNeil, E. B. Personal Hostility and International Aggression. J. Confl. Res., 1961, 5, 279-290.

McNeil, E. B. Psychology and Aggression. J. Confl. Res., 1959, 3, 195-293.

McNeil, E. B. Social Class and the Expression of Emotion. Papers of the Michigan Academcy of Science, Arts and Letters, 1955, 41, 341-348.

McNeil, E. B. The School Mental Health Program. Amer. J. Orthospychia., 1961, 31, 332-339.

McNeil, E. B. Two Styles of Expression: Motoric and Conceptual. In Miller, D. R., and Swanson, G. E. Inner Conflict and Defense, New York: Henry Holt and Company, 1960, 337-356.

Merrill, R. M., and Heathers, Louise B. The Relation of the MMPI to the Edwards Personal Preference Schedule. J. Consult. Psychol., 1956, 20, 310-314.

Miller, D. R., and Swanson, G. E. Inner Conflict and Defense. New York: Henry Holt and Company, 1960.

Moldawsky, Patricia. A Study of Personality Variables in Patients with Skin Disorders. Unpublished Doctoral Dissertation, State University, Iowa, 1953.

Moulton, R. W., and McNeil, E. B. The Relationship of the Socialization Process to the Handling of Aggression in Psychiatric Patients. Papers of the Michigan Academy of Science, Arts and Letters, 1956, 42, 289-297.

Mussen, P. H., and Naylor, H. K. The Relationships Between Overt and Fantasy Aggression. J. abnorm. soc. Psychol., LI (1954), 235-40.

Olson, Willard C. The Child as a Whole (Chap. VII) Child Developm., 2nd Edition, Boston: D. C. Heath, 1959.

Olson, Willard C., and Hughes, Byron O. The Concept of Organismic Age. J. Educat. Res., March 1942.

Osgood, C. E., Suci, G. J., and Tannenbaum, T. H. The Measurement of Meaning, Urbana: University of Illinois Press, 1957.

Pattie, F. A. The Effect of Hypnotically Induced Hostility on Rorschach Responses. J. Clin. Psychol., X (1954), 161-64.

Pope, B. Socio-economic Contrasts in Children's Peer Culture Prestige Values. Genet. Psychol. Monogr., 1953, 48, 157-220.

Purcell, K. The TAT and Antisocial Behavior. J. Consult. Psychol., XX (1956), 449-56.

Redl, F., and Wineman, D. *Children Who Hate*. Glencoe: Free Press, 1951.

Rogers, C. R. *Client-Centered Therapy*. Boston: Houghton-Mifflin Co., 1951.

Rosenbaum, M. D., and DeCharms, R. Direct and Vicarious Reduction of Hostility. *J. abnorm. soc. Psychol*., 1960, *60*, 105-111.

Schultz, S. D. A Differentiation of Several Forms of Hostility by Scales Empirically Constructed from Significant Items on the Minnesota Multiphasic Personality Inventory. Unpublished Doctoral Dissertation, Pennsylvania State College, 1954.

Sears, R. R., Maccoby, E. E., and Levin, H. *Patterns of Child Rearing*. Evanston: Row Peterson, 1957.

Siegel, A. E. Film-mediated Fantasy Aggression and Strength of Aggressive Drive. *Child Developm*., 1956, *27*, 365-378.

Siegel, S. M. The Relationship of Hostility to Authoritarianism. *J. abnorm. soc. Psychol*., 1956, *52*, 268-373.

Silverman, M. I. The Relationship Between Self Esteem and Aggression in Two Social Classes. University of Michigan, Doctoral Dissertation, 1963.

Slavson, S. R. The Treatment of Aggression through Group Therapy. *Amer. J. Orthopsychiat.*, 1943, 13, 419-426.

Smith, J. G. Influence of Failure, Expressed Hostility, and Stimulus Characteristics on Verbal Learning and Recognition. *J. Pers*., 1954, *22*, 475-493.

Snoke, M. L. A Study in the Behavior of Men Students of High and Low Measured Hostility under Two Conditions of Goal Clarity. Unpublished Cotoral Dissertation, University of Minnesota, 1955.

Snygg, D., and Combs, A. *Individual Behavior*. New York: Harper, 1949.

Sperry, Bessie M., Staver, Nancy, and Mann, H. E. Destructive Fantasies in Certain Learning Difficulties. *Amer. J. Orthopsychiat*., XXII (1952), 356-65.

Stone, H. The TAT Aggressive Content Scale. *J. Proj. Techn*., XX (1956), 445-52.

Symonds, P. M. *The Ego and the Self*. New York: Appleton-Century-Crofts, 1961.

Torrance, E. P. *Education and the Creative Potential*. Minneapolis: University of Minnesota Press, 1963.

Torrance, E. P. *Gifted Children in the Classroom*. New York: The MacMillan Co., 1965.

Torrance, E. P. Guilding Creative Talent. Englewood Cliffs, N.J.: Prentice-Hall, 1962.

Torrance, E. P. Talent and Education. Minneapolis: University of Minnesota Press, 1960.

Walters, R. H., and Zakes, M. S. Validation Studies of an Aggression Scale. J. Psychol., 1959, 47, 209-218.

White, R. W. Motivation Reconsidered: The Concept of Competence. Psychol. Rev., 1959, 66, 297-333.

Wolf, Martin G. Effects of Emotional Disturbance in Childhood on Intelligence. Amer. J. Orthopsychiat., Vol. XXXV, No. 5, October, 1965.

Zakes, M. S., and Walters, R. H. First Steps in the Construction of a Scale for the Measurement of Aggression. J. Psychol., 1959, 47, 199-208.

APPENDIX A

Buss-Durkee Parent Hostility-Guilt Inventory

Circle the correct answer. T = True. F = False.

T F 1. I seldom strike back, even if someone hits me first.

T F 2. I sometimes spread gossip about people I don't like.

T F 3. Unless somebody asks me in a nice way, I won't do what they want.

T F 4. I lose my temper easily but get over it quickly.

T F 5. I don't seem to get what's coming to me.

T F 6. I know that people tend to talk about me behind my back.

T F 7. When I disapprove of my friends' behavior, I let them know it.

T F 8. The few times I have cheated, I have suffered unbearable feelings of remorse.

T F 9. Once in a while I cannot control my urge to harm others.

T F 10. I never get mad enough to throw things.

T F 11. When someone makes a rule I don't like I am tempted to break it.

T F 12. Sometimes people bother me just be being around.

T F 13. Other people always seem to get the breaks.

T F 14. I tend to be on my guard with people who are somewhat more friendly than I expected.

T F 15. I often find myself disagreeing with people.

T F 16. I sometimes have bad thought which make me feel ashamed of myself.

T F 17. I can think of no good reasons for ever hitting anyone.

T F 18. When I am angry, I sometimes sulk.

T F 19. When someone is bossy, I do the opposite of what he asks.

T F 20. I am irritated a great deal more than people are aware of.

T F 21. I don't know any people that I downright hate.

T F 22. There are a number of people who seem to dislike me very much.

T F 23. I can't help getting into arguments when people disagree with me.

T F 24. People who shirk on the job must feel very guilty.

T F 25. If somebody hits me first, I let him have it.

Buss-Durkee Parent Hostility-Guilt Inventory

T F 26. When I am mad, I sometimes slam doors.

T F 27. I am always patient with others.

T F 28. Occasionally when I am mad at someone I will give him the "silent treatment."

T F 29. When I look back on what's happened to me, I can't help feeling mildly resentful.

T F 30. There are a number of people who seem to be jealous of me.

T F 31. I demand that people respect my rights.

T F 32. It depresses me that I did not do more for my parents.

T F 33. Whoever insults me or my family is asking for a fight.

T F 34. I never play practical jokes.

T F 35. It makes my blood boil to have somebody make fun of me.

T F 36. When people are bossy, I take my time just to show them.

T F 37. Almost every week I see someone I dislike.

T F 38. I sometimes have the feeling that others are laughing at me.

T F 39. Even when my anger is aroused, I don't use "strong language."

T F 40. I am concerned about being forgiven for my sins.

T F 41. People who continually pester you are asking for a punch in the nose.

T F 42. I sometimes pout when I don't get my own way.

T F 43. If somebody annoys me, I am apt to tell him what I think of him.

T F 44. I often feel like a powder keg ready to explode.

T F 45. Although I don't show it, I am sometimes eaten up with jealousy.

T F 46. My motto is "Never trust strangers."

T F 47. When people yell at me, I yell back.

T F 48. I do many things that make me feel remorseful afterward.

T F 49. When I really lose my temper, I am capable of slapping someone.

T F 50. Since the age of ten, I have never had a temper tantrum.

T F 51. When I get mad, I say nasty things.

T F 52. I sometimes carry a chip on my shoulder.

T F 53. If I let people see the way I feel, I'd be considered a hard person to get along with.

Buss-Durkee Parent Hostility-Guilt Inventory

T F 54. I commonly wonder what hidden reason another person may have for doing something nice for me.

T F 55. I could not put someone in his place, even if he needed it.

T F 56. Failure gives me a feeling of remorse.

T F 57. I get into fights about as often as the next person.

T F 58. I can remember being so angry that I picked up the nearest thing and broke it.

T F 59. I often make threats I don't really mean to carry out.

T F 60. I can't help being a little rude to people I don't like.

T F 61. At times I feel I get a raw deal out of life.

T F 62. I used to think that most people told the truth but now I know otherwise.

T F 63. I generally cover up my poor opinion of others.

T F 64. When I do wrong, my conscience punishes me severely.

T F 65. If I have to resort to physical violence to defend my rights, I will.

T F 66. If someone doesn't treat me right, I don't let it annoy me.

T F 67. I have no enemies who really wish to harm me.

T F 68. When arguing, I tend to raise my voice.

T F 69. I often feel that I have not lived the right kind of life.

T F 70. I have known people who pushed me so far that we came to blows.

T F 71. I don't let a lot of unimportant things irritate me.

T F 72. I seldom feel that people are trying to anger or insult me.

T F 73. Lately, I have been kind of grouchy.

T F 74. I would rather concede a point than get into any argument about it.

T F 75. I sometimes show my anger by banging on the table.

APPENDIX B - PEER NOMINATION VARIABLES

Variable #

1. Who is especially nice to other people?
2. Who acts smart alecky?
3. Who takes other people's things and forgets to return them?
4. Who can get others to do things for them?
5. Who are your best friends?
6. Who says funnier things than other kids do?
7. Who makes it hard for others to get things done?
8. Who shares what they have?
9. Who is good natured?
10. Who always wants to give the answers?
11. Who pushes or shoves?
12. Who gets very, very mad at times?
13. Who does the best schoolwork?
14. Who argues most with everybody?
15. Who is most likely to get things wrong?
16. Who is good at thinking up new ideas?
17. Who says mean things?
18. Who gets angry easily?
19. Who is careful to follow the rules?
20. Who is the fastest worker?
21. Who gets into trouble?
22. Who is the teacher's favorite?
23. Who says bad things about others?
24. Who doesn't finish their work on time?

APPENDIX C

SELF-ESTEEM INVENTORY

(Coopersmith)

NAME ______________________ DATE ______________________

CLASS ______________________ TEACHER ______________________

Please mark each statement in the following way:

If the statement describes how you usually feel, put a check in the column "LIKE ME." If the statement does not describe how you usually feel, put a check in the column "UNLIKE ME."

There are no right or wrong answers.

	LIKE ME	UNLIKE ME
Example: I'm a hard worker.		
1. I spend a lot of time day-dreaming.		
2. I'm pretty sure of myself.		
3. I often wish I were someone else.		
4. I'm easy to like.		
5. My parents and I have a lot fun together.		
6. I never worry about anything.		
7. I find it very hard to talk in front of the class.		
8. I wish I were younger.		
9. There are lots of things about myself I'd change if I could.		
10. I can make up my mind without too much trouble.		
11. I'm a lot of fun to be with.		
12. I get upset easily at home.		
13. I always do the right thing.		
14. I'm proud of my school work.		
15. Someone always has to tell me what to do.		
16. It takes me a long time to get used to anything new.		

		LIKE ME	UNLIKE ME
17.	I'm often sorry for the things I do.		
18.	I'm popular with kids my own age.		
19.	My parents usually consider my feelings.		
20.	I'm never unhappy.		
21.	I'm doing the best work that I can.		
22.	I give in very easily.		
23.	I can usually take care of myself.		
24.	I'm pretty happy.		
25.	I would rather play with children younger than I am.		
26.	My parents expect too much of me.		
27.	I like everyone I know.		
28.	I like to be called on in class.		
29.	I understand myself.		
30.	It's pretty tough to be me.		
31.	Things are all mixed up in my life.		
32.	Kids usually follow my ideas.		
33.	No one pays much attention to me at home.		
34.	I never get scolded.		
35.	I'm not doing as well in school as I'd like to.		
36.	I can make up my mind and stick to it.		
37.	I have a low opinion of myself.		
38.	I don't like to be with other people.		
39.	There are many times when I'd like to leave home.		
40.	I'm never shy.		
41.	I often feel upset in school.		
42.	I often feel ashamed of myself.		
43.	I'm not as nice looking as most people.		
44.	If I have something to say, I usually say it.		
45.	Kids pick on me very often.		
46.	My parents understand me.		
47.	I always tell the truth.		

	LIKE ME	UNLIKE ME
48. My teacher makes me feel I'm not good enough.		
49. I don't care what happens to me.		
50. I'm a failure.		
51. I get upset easily when I'm scolded.		
52. Most people are better liked than I am.		
53. I usually feel as though my parents are pushing me.		
54. I always know what to say to people.		
55. I often get discouraged at school.		
56. Things usually don't bother me.		
57. I can't be depended on.		

Lie Scale items:

6. I never worry about anything.
13. I always do the right thing.
20. I'm never unhappy.
27. I like everyone I know.
34. I never get scolded.
41. I'm never shy.
48. I always tell the truth.
55. I always know what to say to people.

APPENDIX D

SEMANTIC DIFFERENTIAL

MYSELF

good	___:___:___:___:___:___:___	bad
uncertain	___:___:___:___:___:___:___	certain
large	___:___:___:___:___:___:___	small
beautiful	___:___:___:___:___:___:___	ugly
sad	___:___:___:___:___:___:___	happy
clean	___:___:___:___:___:___:___	dirty
lazy	___:___:___:___:___:___:___	hardworking
light	___:___:___:___:___:___:___	heavy
never worry	___:___:___:___:___:___:___	worry a lot
cold	___:___:___:___:___:___:___	hot
honest	___:___:___:___:___:___:___	dishonest
weak	___:___:___:___:___:___:___	strong
awful	___:___:___:___:___:___:___	nice
fair	___:___:___:___:___:___:___	unfair
hate myself	___:___:___:___:___:___:___	like myself
slow	___:___:___:___:___:___:___	fast
thick	___:___:___:___:___:___:___	thin
pretend	___:___:___:___:___:___:___	true
unimportant	___:___:___:___:___:___:___	important
active	___:___:___:___:___:___:___	passive